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1983 Joint Association Survey

On Drilling Costs

SPONSORED BY:

- American Petroleum Institute
- Independent Petroleum Association of America
- Mid-Continent Oil & Gas Association

American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005

1983 Joint Association Survey On Drilling Costs

Statistics Department

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PREFACE

The purpose of the Joint Association Survey is to provide annual information pertaining to the cost of drilling oil and gas wells and dry holes in the United States.

Drilling costs for 1983 are presented in this issue of the JAS. Section II, pertaining to expenditures for finding, developing, and producing oil and gas, was discontinued following the publication of 1975 statistics. Comparable data is available from the Annual Survey of Oil and Gas, Bureau of the Census.

As in prior years, data for the 1983 JAS were collected from the petroleum industry through the joint efforts of the American Petroleum Institute, the Independent Petroleum Association of America, and the Mid-Continent Oil and Gas Association.

Washington, D.C.
November 1984

CONTENTS

Page

Preface iii
Summary of Findings 1
Description of Survey 2
Definitions 2
The 1983 Universe 2
The 1983 Sample 3
Determination of Unreported Wells and Footage 3
Estimation of Total Costs 4
Findings for 1983 4
Summary of Sample Data for 1983 4

TABLES

1. Total Number of Wells, Footage Drilled and Estimated Drilling Costs for Oil and Gas Wells, and Dry Holes by State--1983 6
2. Estimated Cost of Drilling and Equipping Wells by Depth Range--1983 Total United States 8
3. Estimated Cost of Drilling and Equipping Wells by Depth Range—1983 Total Offshore Wells 9
4. Estimated Cost of Drilling and Equipping Wells by Depth Range—1983 Total Onshore Wells 10
5. Alabama 11
6. Total Alaska 12
7. Onshore Alaska 13
8. Offshore Alaska 14
9. Arkansas 15
10. Total California 16
11. North California 17
12. Central Coastal California 18
13. East Central California 19
14. South California 20
15. Offshore California 21
16. Colorado 22
17. Florida 23
18. Illinois 24
19. Indiana 25
20. Kansas 26
21. Kentucky 27
22. Total Louisiana 28

CONTENTS (Cont.)

		Page
23.	North Louisiana	29
24.	South Louisiana	30
25.	Offshore Louisiana	31
26.	Michigan	32
27.	Mississippi	33
28.	Montana	34
29.	Nebraska	35
30.	Total New Mexico	36
31.	West New Mexico	37
32.	East New Mexico	38
33.	North Dakota	39
34.	Oklahoma	40
35.	Total Texas	41
36.	Texas--District 1	42
37.	Texas--District 2	43
38.	Texas--District 3	44
39.	Texas--District 4	45
40.	Texas--District 5	46
41.	Texas--District 6	47
42.	Texas--District 7B	48
43.	Texas--District 7C	49
44.	Texas--District 8	50
45.	Texas--District 8A	51
46.	Texas--District 9	52
47.	Texas--District 10	53
48.	Offshore Texas	54
49.	Utah	55
50.	Wyoming	56
51.	Appalachian	57
52.	Offshore Federal Waters	58
53.	Gulf of Mexico--Northern	59

CONTENTS (Cont.)

		Page
APPENDIX A—	Joint Association Survey Questionnaire--1983	62
APPENDIX B—	Instructions and Definitions for JAS	63
APPENDIX C—	Reconciliation of Total 1983 U.S. Wells and Footage, Quarterly Review of Drilling Statistics vs. JAS	65
APPENDIX D—	Summary of Sample Data as Reported for Exploratory and Development Wells—1983	66
APPENDIX E—	Summary of Sample Data as Reported for Single and Multiple Completion Wells--1983	68
APPENDIX F—	JAS Sample Distribution 1979-1983	70
APPENDIX G—	MAP I: Subdivisions of Alaska	71
	MAP II: Subdivisions of California	72
	MAP III: California Offshore	73
	MAP IV: Subdivisions of Louisiana	74
	MAP V: Louisiana Offshore	75
	MAP VI: Subdivisions of New Mexico	76
	MAP VII: Subdivisions of Texas	77
	MAP VIII: Texas Offshore	78
	MAP IX: Subdivisions of Offshore Federal Waters Alaska	79
	MAP X: Subdivisions of Offshore Federal Waters Atlantic Coast	80
	MAP XI: Subdivisions of Offshore Federal Waters Gulf of Mexico--Northern	81
	MAP XII: Subdivisions of Offshore Federal Waters Pacific Coast	82
APPENDIX H—	Joint Association Survey Methodology	83

JOINT ASSOCIATION SURVEY
ON DRILLING COSTS—1983

SUMMARY OF FINDINGS. Findings pertaining to 1983 drilling costs and activity in the United States may be summarized as follows:

- The total cost of drilling and equipping oil and gas wells and dry holes in 1983 amounted to approximately $25,105 million, a decrease of 36.3 per cent from 1982.
- The average depth of oil wells completed in 1983 was 3,907 feet, a decrease of 2.9 per cent; the average cost per foot in 1983 was $72.65, a decrease of 15.9 per cent from the previous year.
- The average depth of gas wells completed in 1983 was 5,611 feet, a decrease of 5.1 per cent; the average cost per foot in 1983 was $108.37, a decrease of 25.9 per cent from the previous year.
- The average depth of dry holes drilled in 1983 was 4,633 feet, a decrease of 6.4 per cent; the average cost per foot was $79.10, a decrease of 24.0 per cent from 1982.
- The total number of wells drilled in 1983 decreased 11.9 per cent and the total footage drilled decreased 16.9 per cent.
- The total cost of offshore wells completed in 1983 amounted to approximately $4,961 million, a decrease of 19.4 per cent from 1982. The total number of offshore wells decreased 13.3 per cent from 1982 while the average depth increased 1.8 per cent. The average cost per foot in 1983 was $386.59, a decrease of 8.7 per cent.
- The comparison of drilling activity and the cost of various types of wells completed in 1982 and 1983 is as follows:

	Oil Wells		Gas Wells	
	1982	1983	1982	1983
Wells Drilled	35,865	33,485	17,052	12,919
Footage Drilled (000)	144,305	130,824	100,804	72,487
Total Cost (millions)*	$12,459	$9,504	$14,738	$7,856
Average Depth (feet)	4,024	3,907	5,912	5,611
Average Cost Per Well*	$347,374	$283,821	$864,278	$608,078
Average Cost Per Foot*	$86.34	$72.65	$146.20	$108.37

	Dry Holes		Total Wells	
	1982	1983	1982	1983
Wells Drilled	23,735	21,132	76,652	67,536
Footage Drilled (000)	117,510	97,915	362,618	301,226
Total Cost (millions)*	$12,232	$7,745	$39,428	$25,105
Average Depth (feet)	4,951	4,633	4,731	4,460
Average Cost Per Well*	$515,352	$366,507	$514,378	$371,721
Average Cost Per Foot*	$104.09	$79.10	$108.73	$83.34

*Includes all costs incurred for drilling and equipping wells through the "Christmas tree"
NOTE: Totals may not agree with the sum of the individual items because of independent rounding.

DESCRIPTION OF SURVEY. The 1983 Joint Association Survey (JAS) contains information on drilling costs derived from a sample of wells, footage, and costs collected from operators of different sizes who drilled wells in various areas of the United States. The drilling costs reported are those incurred for drilling and equipping wells through the "Christmas tree."

Estimates of drilling costs were derived by combining sample data with the 1983 drilling statistics as compiled by the American Petroleum Institute (API) and the Committee on Statistics of Drilling of the American Association of Petroleum Geologists (AAPG-CSD). The procedures for preparing these estimates for the 1983 JAS are described in the following sections.

DEFINITIONS. Copies of the 1983 questionnaire, instructions, and definitions may be found in Appendices A and B. Maps showing geographic subdivisions of Alaska, California, Louisiana, New Mexico, Texas, Offshore Federal Waters Alaska, Offshore Federal Waters Atlantic Coast, Offshore Federal Waters Gulf of Mexico-Northern, and Offshore Federal Waters Pacific Coast are shown in Appendix G.

The 1983 UNIVERSE. In 1983 the API and the AAPG-CSD reported a total of 76,329 oil and gas wells and dry holes.* It was necessary to adjust the data reported in the API Quarterly Review of Drilling Statistics (QRDS) as follows:

1. Adjustments Type I (Net). Adjustments of this type represent:
   a. The elimination of old wells drilled deeper (and corresponding footage).
   b. The elimination of wells completed in 1982 or prior years (and corresponding footage), but reported in the QRDS in 1983.
   c. The elimination of sidetracked (bypassed) and redrill footage.
   d. The inclusion of wells completed in 1983, but not reported in the QRDS until 1984.
2. Adjustments Type II (Net). Total adjustments of this type represent:
   a. The elimination of wells previously reported in the 1982 JAS.
   b. The inclusion of wells not reported in the QRDS but reported and confirmed by JAS respondents as actually drilled in 1983.

The adjustment of published data as outlined above resulted in a total of 67,536 oil and gas wells and dry holes (representing 301,225,832 feet) which constituted the drilling universe used for estimating total expenditures for 1983. (See Appendix C.)

*See API Quarterly Review of Drilling Statistics, Vol. XVII, No. 4, February 1984, pp. 14-19.

THE 1983 SAMPLE. As in previous years, questionnaires were mailed to operators which were recorded as having drilled wells in the different areas of the United States during 1983. Replies to the Survey were contingent upon voluntary responses, with a continued effort being made to increase the sample size, particularly with respect to the smaller operators. An analysis of the number of companies (operators), classified by the number of wells drilled, included in the sample for the years 1979-1983 is shown in Appendix F.

The number of oil wells, gas wells, and dry holes reported to the JAS in 1982 and 1983 as percentages of total wells drilled in each of the six selected states is as follows:

	Per Cent of Total					
	Oil Wells		Gas Wells		Dry Holes	
	1982	1983	1982	1983	1982	1983
California	80	84	58	76	48	67
Kansas	27	26	36	40	32	32
Louisiana	41	32	38	35	43	40
New Mexico	55	66	66	74	48	52
Oklahoma	25	24	34	31	28	29
Texas	35	37	44	43	27	26

The following tabulation shows the total number of wells and footage reported to the JAS in 1982 and 1983 as compared to the wells and footage which comprised the JAS drilling universe for these two years.

	1982 Survey			1983 Survey		
	Total	Sample	Per Cent of Total	Total	Sample	Per Cent of Total
Oil Wells	35,865	12,780	35.6	33,485	11,979	35.8
Footage (thousands)	144,305	63,845	44.2	130,824	58,866	45.0
Total Cost (millions)	$12,459	$6,940	55.7	$9,504	$5,289	55.7
Gas Wells	17,052	6,498	38.1	12,919	4,468	34.6
Footage (thousands)	100,804	47,466	47.1	72,487	31,759	43.8
Total Cost (millions)	$14,738	$8,487	57.6	$7,856	$4,402	56.0
Dry Holes	23,735	7,262	30.6	21,132	6,191	29.3
Footage (thousands)	117,510	49,177	41.8	97,915	39,845	40.7
Total Cost (millions)	$12,232	$7,226	59.1	$7,745	$4,650	60.0
Total Wells	76,652	26,540	34.6	67,536	22,638	33.5
Footage (thousands)	362,618	160,489	44.3	301,226	130,471	43.3
Total Cost (millions)	$39,428	$22,654	57.5	$25,105	$14,341	57.1

NOTE: Totals may not agree with the sum of the individual items because of independent rounding.

DETERMINATION OF UNREPORTED WELLS AND FOOTAGE. Individual wells (and footage) derived by adjustment of QRDS data were classified according to type of well (oil, gas or dry), location, and depth. Individual wells reported to the JAS were classified in like manner. The wells and footage reported to the JAS in each category were subtracted from the number of wells and footage in corresponding categories for the adjusted universe. The difference represented the unreported wells and footage by type of well, location, and depth interval.

ESTIMATION OF TOTAL COSTS. The average cost per foot drilled in each category was computed on the basis of information reported to the JAS. Based on the sample wells reported for each area, least squares regression analysis was used to determine the functional relationship between the cost per foot and well depth for each type of well. (See Appendix H for a description of the methodology.)

The cost per foot for the unreported wells in each category was then estimated from the least squares analysis for each area. For the relatively few unreported wells falling outside the depth range of the sample, for which regression analysis did not provide meaningful estimates, cost estimates were based on an analysis of costs in similar areas and of prior years' data. This was necessary for approximately 6.4 per cent of all unreported wells.

The cost per foot for the unreported wells was then multiplied by the unreported footage in each depth range to obtain the unreported cost for each category. Total estimated expenditures were obtained by adding the reported costs to estimated unreported costs.

FINDINGS FOR 1983. Cost data are shown in Tables 1-53 for the Total United States, Total Onshore United States, and Total Offshore United States as well as for Offshore Federal Waters and Gulf of Mexico--Northern.

Those wells drilled in the Atlantic Coast Federal Waters, Alaska Federal Waters, and Pacific Coast Federal Waters are not shown separately to avoid disclosure of proprietary data, but are included in Table 52, "Offshore Federal Waters" on page 58. However, total wells, footage, and costs for these areas are shown in Table 1.

In addition, expenditures are reported for the individual states and for the subdivisions of Alaska, California, Louisiana, New Mexico, and Texas.

SUMMARY OF SAMPLE DATA FOR 1983. Additional information concerning the cost of exploratory, development, single completion, and multiple completion wells as reported to the Joint Association Survey is summarized for the United States in Appendices D and E.

Sample data in these four categories, summarized by depth intervals for individual states, may be purchased from the American Petroleum Institute on magnetic tape or in the form of a computer listing. Data in either format are summarized to the extent necessary to avoid disclosure of individual well costs.

Requests for price quotations should be directed to the Statistics Department, Office of the Director, American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005. (Note: Orders will be accepted only for the complete summary.)

TABLES CONTAINING FINDINGS

Please note that the average depth and cost per well have not been rounded upward on the following tables.

Table 1 TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND ESTIMATED DRILLING

STATE	OIL WELLS			GAS WELLS		
	WELLS DRILLED	TOTAL FOOTAGE	COST	WELLS DRILLED	TOTAL FOOTAGE	COST
ALABAMA	25	119,812	22,147,137	76	327,764	61,823,130
ALASKA - ONSHORE	173	1,677,860	490,207,969	--	--	--
ALASKA - OFFSHORE	3	33,685	28,179,396	--	--	--
ALASKA - TOTAL	176	1,711,545	518,387,365	--	--	--
ARKANSAS	316	1,331,601	51,637,334	194	1,020,972	89,343,299
CALIFORNIA - NORTH	4	24,450	1,381,415	83	599,552	58,144,370
CALIFORNIA -CENTRAL COASTAL	150	615,603	74,065,815	--	--	--
CALIFORNIA - EAST CENTRAL	1,562	3,227,016	311,374,387	4	19,632	3,927,635
CALIFORNIA - SOUTH	120	457,024	66,471,519	--	--	--
CALIFORNIA - OFFSHORE	78	486,571	207,093,875	7	61,977	45,491,556
CALIFORNIA - TOTAL	1,914	4,810,664	658,387,011	94	681,161	107,563,561
COLORADO	440	2,866,199	153,488,813	443	2,812,059	157,262,023
FLORIDA	5	71,891	14,214,000	--	--	--
ILLINOIS	1,597	3,962,196	135,710,030	17	14,876	467,554
INDIANA	411	794,377	20,690,831	22	25,361	1,189,159
KANSAS	3,629	9,295,273	321,626,395	400	1,307,425	53,864,078
KENTUCKY	1,234	1,538,103	61,733,014	190	396,406	20,703,476
LOUISIANA - NORTH	1,298	3,192,266	149,279,149	629	2,331,863	163,744,914
LOUISIANA - SOUTH	357	2,960,555	387,915,579	220	2,668,392	607,443,984
LOUISIANA - OFFSHORE	330	3,320,788	987,458,892	197	2,110,509	722,279,465
LOUISIANA - TOTAL	1,985	9,473,609	1,524,653,620	1,046	7,110,744	1,493,468,363
MICHIGAN	329	1,383,970	87,864,958	47	222,928	17,962,556
MISSISSIPPI	143	1,159,646	88,052,975	44	451,256	77,662,101
MONTANA	172	918,295	67,880,818	73	128,148	6,647,308
NEBRASKA	129	389,951	24,834,516	14	47,969	1,459,989
NEW MEXICO - EAST	502	2,809,010	202,404,609	270	1,880,242	201,657,098
NEW MEXICO - WEST	230	1,354,845	94,649,332	239	1,352,967	76,878,096
NEW MEXICO - TOTAL	732	4,163,855	297,053,941	509	3,233,209	278,535,194
NORTH DAKOTA	281	2,689,941	256,045,535	7	89,120	14,318,449
OKLAHOMA	4,370	18,280,396	1,128,231,958	1,562	10,813,894	1,606,245,714
TEXAS RRC DIST. 1	1,797	4,102,273	160,834,759	86	314,833	63,116,740
TEXAS RRC DIST. 2	138	773,614	51,841,216	276	2,015,313	188,450,877
TEXAS RRC DIST. 3	981	6,998,162	522,930,196	312	2,788,962	312,621,026
TEXAS RRC DIST. 4	185	1,082,465	61,518,494	565	5,032,208	678,306,292
TEXAS RRC DIST. 5	289	362,237	27,343,945	98	1,070,359	153,134,989
TEXAS RRC DIST. 6	460	2,511,516	175,304,808	326	3,092,124	348,870,026
TEXAS RRC DIST. 7B	1,991	5,972,197	237,915,054	548	1,933,962	76,159,670
TEXAS RRC DIST. 7C	950	5,034,605	272,127,382	361	2,358,670	125,862,518
TEXAS RRC DIST. 8	2,146	11,473,641	723,274,945	87	619,472	104,665,424
TEXAS RRC DIST. 8A	1,289	7,260,198	382,588,238	11	61,135	4,776,195
TEXAS RRC DIST. 9	1,807	5,732,569	232,757,917	181	1,006,076	49,875,427
TEXAS RRC DIST. 10	702	3,147,255	187,673,631	205	1,581,481	160,477,229
TEXAS - OFFSHORE	20	185,087	82,978,295	76	807,395	376,749,000
TEXAS - TOTAL	12,755	54,835,819	3,119,088,900	3,132	22,882,010	2,643,066,013
UTAH	149	967,862	201,668,211	105	695,301	146,072,047
WYOMING	693	3,933,940	336,251,744	137	1,592,108	335,400,067
APPALACHIAN*	1,966	5,327,786	182,714,633	4,654	18,277,396	664,568,412
OFFSHORE FED. - ALASKA	--	--	--	--	--	--
OFFSHORE FED. - ATLANTIC	--	--	--	--	--	--
OFFSHORE FED. - GULF NORTH	23	255,778	145,784,733	13	144,612	68,512,772
OFFSHORE FED. - PACIFIC	5	30,539	47,657,087	--	--	--
OFFSHORE FED - TOTAL	28	286,317	193,441,820	13	144,612	68,512,772
OTHER UNITED STATES**	206	310,881	17,955,461	120	212,625	9,627,059
TOTAL OFFSHORE	459	4,312,448	1,499,152,278	293	3,124,493	1,213,032,793
TOTAL ONSHORE	33,026	126,511,481	8,004,608,782	12,626	69,362,851	6,642,729,531
TOTAL U.S.	33,485	130,823,929	9,503,761,060	12,919	72,487,344	7,855,762,324
EXPLORATORY WELLS	1,997	10,588,920	911,808,796	1,577	10,728,449	1,826,244,202
DEVELOPMENT WELLS	31,488	120,235,009	8,591,952,264	11,342	61,758,893	6,029,518,122

* Includes New York, Ohio, Pennsylvania and West Virginia.
** Includes Arizona, Georgia, Idaho, Missouri, Nevada, Oregon, South Dakota, Tennessee, Virginia, and Washington.

COSTS FOR OIL AND GAS WELLS, AND DRY HOLES, BY STATE - 1983

Table 1

DRY HOLES			TOTAL WELLS			
WELLS DRILLED	TOTAL FOOTAGE	COST	WELLS DRILLED	TOTAL FOOTAGE	COST	STATE
103	709,355	63,707,578	204	1,156,931	147,677,845	ALABAMA
7	78,694	94,406,937	180	1,756,554	584,614,906	ALASKA - ONSHORE
1	16,527	45,215,968	4	50,212	73,395,364	ALASKA - OFFSHORE
8	95,221	139,622,905	184	1,806,766	658,010,270	ALASKA - TOTAL
345	1,655,766	75,538,033	855	4,008,339	216,518,686	ARKANSAS
116	766,384	37,590,811	203	1,390,386	97,116,596	CALIFORNIA - NORTH
27	150,305	30,059,086	177	765,908	104,124,901	CALIFORNIA -CENTRAL COASTAL
89	492,912	46,812,096	1,655	3,739,620	362,114,118	CALIFORNIA - EAST CENTRAL
7	43,297	4,553,177	127	500,321	69,024,696	CALIFORNIA - SOUTH
15	169,442	176,493,362	100	717,990	429,078,793	CALIFORNIA - OFFSHORE
254	1,622,400	295,508,532	2,262	7,114,225	1,061,459,104	CALIFORNIA - TOTAL
517	2,829,507	111,118,395	1,400	8,507,765	421,869,231	COLORADO
13	165,739	33,555,411	18	237,630	47,769,411	FLORIDA
1,082	2,419,737	46,878,507	2,696	6,396,809	203,056,111	ILLINOIS
545	1,033,977	21,168,426	978	1,853,715	43,048,416	INDIANA
2,885	10,352,177	198,089,909	6,714	20,954,875	573,580,382	KANSAS
1,613	2,307,519	48,298,335	3,037	4,242,028	130,734,825	KENTUCKY
885	3,978,793	123,496,825	2,812	9,502,902	436,520,888	LOUISIANA - NORTH
613	6,883,192	763,690,058	1,190	12,512,139	1,759,049,621	LOUISIANA - SOUTH
345	3,614,046	1,081,175,821	872	9,045,343	2,790,914,178	LOUISIANA - OFFSHORE
1,843	14,476,031	1,968,362,704	4,874	31,060,384	4,986,484,687	LOUISIANA - TOTAL
391	1,857,194	88,896,923	767	3,464,092	194,724,437	MICHIGAN
364	2,943,813	202,627,860	551	4,554,715	368,342,936	MISSISSIPPI
241	1,217,362	95,220,050	486	2,263,805	169,748,176	MONTANA
209	1,086,799	19,516,123	352	1,724,719	45,810,628	NEBRASKA
190	1,190,025	86,339,269	962	5,879,277	490,400,976	NEW MEXICO - EAST
47	131,144	23,949,878	516	2,838,956	195,477,306	NEW MEXICO - WEST
237	1,321,169	110,289,147	1,478	8,718,233	685,878,282	NEW MEXICO - TOTAL
205	1,685,980	106,895,441	493	4,465,041	377,259,445	NORTH DAKOTA
2,324	11,594,046	962,508,756	8,256	40,688,336	3,696,986,428	OKLAHOMA
476	1,690,984	82,531,357	2,359	6,308,090	306,482,856	TEXAS RRC DIST. 1
261	1,671,967	98,616,862	675	4,460,894	338,908,955	TEXAS RRC DIST. 2
545	4,044,866	284,568,223	1,838	13,831,990	1,120,119,445	TEXAS RRC DIST. 3
488	3,450,333	251,449,439	1,238	9,565,006	991,274,825	TEXAS RRC DIST. 4
175	832,465	74,827,407	562	2,465,061	255,306,341	TEXAS RRC DIST. 5
291	1,933,763	126,594,841	1,077	7,537,403	650,769,675	TEXAS RRC DIST. 6
1,603	4,811,599	118,182,563	4,142	12,717,758	432,257,287	TEXAS RRC DIST. 7B
424	2,025,027	55,595,515	1,735	9,418,302	453,585,415	TEXAS RRC DIST. 7C
291	1,979,453	210,331,115	2,524	14,072,566	1,038,271,484	TEXAS RRC DIST. 8
358	2,642,741	116,632,540	1,658	9,964,094	503,996,993	TEXAS RRC DIST. 8A
1,611	4,814,920	114,241,884	3,599	11,553,565	396,875,228	TEXAS RRC DIST. 9
127	1,002,243	65,731,265	1,034	5,730,979	413,882,125	TEXAS RRC DIST. 10
111	1,148,131	499,067,976	207	2,140,613	958,795,271	TEXAS - OFFSHORE
6,761	32,048,492	2,098,370,987	22,648	109,766,321	7,860,525,900	TEXAS - TOTAL
136	718,162	156,237,432	390	2,381,325	503,977,690	UTAH
567	4,122,140	366,037,036	1,417	9,648,188	1,037,688,847	WYOMING
260	824,465	28,915,787	6,880	24,429,647	876,198,832	APPALACHIAN*
--	--	--	--	--	--	OFFSHORE FED. - ALASKA
2	29,000	59,133,552	2	29,000	59,133,552	OFFSHORE FED. - ATLANTIC
29	311,867	203,917,553	65	712,257	418,215,058	OFFSHORE FED. - GULF NORTH
15	105,952	183,534,658	20	136,491	231,191,745	OFFSHORE FED. - PACIFIC
46	446,819	446,583,763	87	877,748	708,540,355	OFFSHORE FED - TOTAL
183	380,689	61,069,169	509	904,193	88,651,689	OTHER UNITED STATES**
518	5,394,965	2,248,538,890	1,270	12,831,906	4,960,723,961	TOTAL OFFSHORE
20,614	92,519,594	5,496,480,339	66,266	288,393,926	20,143,818,652	TOTAL ONSHORE
21,132	97,914,559	7,745,019,229	67,536	301,225,832	25,104,542,613	TOTAL U.S.
9,241	47,163,978	4,432,949,300	12,815	68,481,347	7,171,002,298	EXPLORATORY WELLS
11,891	50,750,581	3,312,069,929	54,721	232,744,485	17,933,540,315	DEVELOPMENT WELLS

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TOTAL UNITED STATES*

Table 2

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		6,240	732	3,025	9,997				
FOOTAGE	0 - 1,249	5,102,860	639,974	2,247,831	7,990,665	818	874	743	799
COSTS $		200,819,857	28,562,384	67,343,250	296,725,991	32,183	39,020	22,262	29,682
WELLS		6,673	1,688	3,586	11,947				
FOOTAGE	1,250 - 2,499	11,842,708	3,267,850	6,510,943	21,621,401	1,775	1,936	1,816	1,810
COSTS $		529,467,670	133,611,643	160,141,829	823,221,142	79,345	79,154	44,658	68,906
WELLS		6,738	2,020	3,686	12,444				
FOOTAGE	2,500 - 3,749	21,277,275	6,564,507	11,730,050	39,571,832	3,158	3,250	3,182	3,180
COSTS $		927,941,807	283,567,895	295,459,295	1,506,968,997	137,718	140,380	80,157	121,100
WELLS		4,682	2,702	3,381	10,765				
FOOTAGE	3,750 - 4,999	20,550,374	11,518,881	14,759,849	46,829,104	4,389	4,263	4,366	4,350
COSTS $		1,038,149,796	460,854,370	421,283,660	1,920,287,826	221,732	170,560	124,603	178,383
WELLS		4,551	2,581	3,701	10,833				
FOOTAGE	5,000 - 7,499	27,843,021	15,532,692	22,607,576	65,983,289	6,118	6,018	6,109	6,091
COSTS $		1,724,236,654	829,112,424	972,662,835	3,526,011,913	378,870	321,237	262,811	325,488
WELLS		3,158	1,474	1,915	6,547				
FOOTAGE	7,500 - 9,999	27,317,990	12,747,168	16,427,964	56,493,122	8,650	8,648	8,579	8,629
COSTS $		2,264,868,202	1,099,750,685	1,232,051,472	4,596,670,359	717,184	746,100	643,369	702,103
WELLS		1,077	939	1,003	3,019				
FOOTAGE	10,000 - 12,499	11,761,581	10,401,526	11,126,086	33,289,193	10,921	11,077	11,093	11,027
COSTS $		1,546,716,426	1,523,591,200	1,167,681,422	4,237,989,048	1,436,134	1,622,568	1,164,189	1,403,773
WELLS		294	430	504	1,228				
FOOTAGE	12,500 - 14,999	3,934,151	5,786,139	6,784,227	16,504,567	13,381	13,456	13,461	13,440
COSTS $		849,807,149	1,274,969,080	1,371,774,939	3,496,551,168	2,890,501	2,965,044	2,721,776	2,847,354
WELLS		61	232	217	510				
FOOTAGE	15,000 - 17,499	981,149	3,721,120	3,490,861	8,193,130	16,084	16,039	16,087	16,065
COSTS $		333,981,856	1,124,949,397	960,103,914	2,419,035,167	5,475,113	4,848,920	4,424,442	4,743,206
WELLS		9	94	80	183				
FOOTAGE	17,500 - 19,999	166,015	1,727,526	1,474,613	3,368,154	18,446	18,378	18,433	18,405
COSTS $		60,703,155	714,156,681	614,149,799	1,389,009,635	6,744,795	7,597,412	7,676,873	7,590,217
WELLS		2	27	34	63				
FOOTAGE	20,000 & OVER	46,805	579,911	754,659	1,381,375	23,403	21,478	22,196	21,927
COSTS $		27,068,488	382,636,065	482,366,814	892,071,367	13,534,244	14,171,706	14,187,259	14,159,863
TOTAL WELLS		33,485	12,919	21,132	67,536				
TOTAL FOOTAGE		130,823,929	72,487,344	97,914,559	301,225,832	3,907	5,611	4,633	4,460
TOTAL COSTS $		9,503,761,060	7,855,762,324	7,745,019,229	25,104,542,613	283,821	608,078	366,507	371,721

* Includes the following states and areas which are not shown separately: Arizona, Georgia, Idaho, Missouri, Nevada, Oregon, South Dakota, Tennessee, Virginia, Washington, Offshore Federal Waters-Alaska, Offshore Federal Waters-Atlantic Coast and Offshore Federal Waters-Pacific Coast.

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TOTAL OFFSHORE*

Table 3

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	4	4				
FOOTAGE	0 - 1,249	--	--	3,525	3,525	--	--	881	881
COSTS $		--	--	11,502,272	11,502,272	--	--	2,875,568	2,875,568
WELLS		2	--	4	6				
FOOTAGE	1,250 - 2,499	3,727	--	6,776	10,503	1,864	--	1,694	1,751
COSTS $		4,872,415	--	5,807,063	10,679,478	2,436,208	--	1,451,766	1,779,913
WELLS		3	4	6	13				
FOOTAGE	2,500 - 3,749	9,411	12,854	20,211	42,476	3,137	3,214	3,369	3,267
COSTS $		9,181,570	6,641,687	13,956,641	29,779,898	3,060,523	1,660,422	2,326,107	2,290,762
WELLS		31	9	11	51				
FOOTAGE	3,750 - 4,999	138,679	36,715	47,793	225,187	4,474	4,302	4,345	4,415
COSTS $		73,637,106	16,548,497	29,246,677	119,432,280	2,375,391	1,838,722	2,658,789	2,341,810
WELLS		102	40	91	233				
FOOTAGE	5,000 - 7,499	633,361	248,336	590,408	1,472,105	6,209	6,208	6,488	6,318
COSTS $		201,996,390	71,222,472	208,098,419	481,317,281	1,980,357	1,780,562	2,286,796	2,065,739
WELLS		124	66	129	319				
FOOTAGE	7,500 - 9,999	1,086,427	590,669	1,127,228	2,804,324	8,762	8,950	8,738	8,791
COSTS $		320,157,740	203,872,536	430,665,470	954,695,746	2,581,917	3,088,978	3,338,492	2,992,777
WELLS		124	90	122	336				
FOOTAGE	10,000 - 12,499	1,407,294	1,017,639	1,376,701	3,801,634	11,349	11,307	11,284	11,314
COSTS $		434,293,123	395,716,916	453,438,798	1,283,448,837	3,502,364	4,396,855	3,716,712	3,819,788
WELLS		54	53	96	203				
FOOTAGE	12,500 - 14,999	726,909	714,164	1,308,261	2,749,334	13,461	13,475	13,628	13,544
COSTS $		306,565,499	292,922,966	600,904,090	1,200,392,555	5,677,139	5,526,849	6,259,418	5,913,264
WELLS		18	26	42	86				
FOOTAGE	15,000 - 17,499	286,640	413,288	673,475	1,373,403	15,924	15,896	16,035	15,970
COSTS $		135,400,370	184,256,056	348,968,407	668,624,833	7,522,243	7,086,772	8,308,772	7,774,708
WELLS		--	5	11	16				
FOOTAGE	17,500 - 19,999	--	88,828	199,243	288,071	--	17,766	18,113	18,004
COSTS $		--	41,851,663	117,117,478	158,969,141	--	8,370,333	10,647,043	9,935,571
WELLS		1	--	2	3				
FOOTAGE	20,000 & OVER	20,000	--	41,344	61,344	20,000	--	20,672	20,448
COSTS $		13,048,065	--	28,833,575	41,881,640	13,048,065	--	14,416,788	13,960,547
TOTAL WELLS		459	293	518	1,270				
TOTAL FOOTAGE		4,312,448	3,124,493	5,394,965	12,831,906	9,395	10,664	10,415	10,104
TOTAL COSTS $		1,499,152,278	1,213,032,793	2,248,538,890	4,960,723,961	3,266,127	4,140,044	4,340,809	3,906,082

* Includes Offshore Federal Waters-Alaska, Offshore Federal Waters-Atlantic Coast, and Offshore Federal Waters-Pacific Coast, which are not shown separately.

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TOTAL ONSHORE*

Table 4

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		6,240	732	3,021	9,993				
FOOTAGE	0 - 1,249	5,102,860	639,974	2,244,306	7,987,140	818	874	743	799
COSTS $		200,819,857	28,562,884	55,840,978	285,223,719	32,183	39,020	18,484	28,542
WELLS		6,671	1,688	3,582	11,941				
FOOTAGE	1,250 - 2,499	11,838,981	3,267,850	6,504,067	21,610,898	1,775	1,936	1,816	1,810
COSTS $		524,595,255	133,611,643	154,334,766	812,541,664	78,638	79,154	43,086	68,046
WELLS		6,735	2,016	3,680	12,431				
FOOTAGE	2,500 - 3,749	21,267,864	6,551,653	11,709,839	39,529,356	3,158	3,250	3,182	3,180
COSTS $		918,760,237	276,926,208	281,502,654	1,477,189,099	136,416	137,364	76,495	118,831
WELLS		4,651	2,693	3,370	10,714				
FOOTAGE	3,750 - 4,999	20,411,695	11,430,166	14,712,056	46,603,917	4,389	4,263	4,366	4,350
COSTS $		964,512,690	444,305,873	392,036,983	1,800,855,546	207,377	164,985	116,331	168,084
WELLS		4,449	2,541	3,610	10,600				
FOOTAGE	5,000 - 7,499	27,209,660	15,284,356	22,017,168	64,511,184	6,116	6,015	6,099	6,086
COSTS $		1,522,240,264	757,889,952	764,564,416	3,044,694,632	342,153	298,264	211,791	287,235
WELLS		3,034	1,408	1,786	6,228				
FOOTAGE	7,500 - 9,999	26,231,563	12,156,499	15,300,736	53,688,798	8,646	8,634	8,567	8,621
COSTS $		1,944,710,462	895,378,149	801,386,002	3,641,974,613	640,972	636,277	448,704	584,774
WELLS		953	349	381	2,683				
FOOTAGE	10,000 - 12,499	10,354,287	9,383,887	9,749,385	29,487,559	10,865	11,053	11,066	10,991
COSTS $		1,112,423,303	1,127,874,284	714,242,624	2,954,540,211	1,167,286	1,328,474	810,718	1,101,208
WELLS		240	377	408	1,025				
FOOTAGE	12,500 - 14,999	3,207,242	5,072,025	5,475,966	13,755,233	13,364	13,454	13,421	13,420
COSTS $		543,241,650	982,046,114	770,870,849	2,296,158,613	2,263,507	2,604,897	1,889,389	2,240,155
WELLS		43	206	175	424				
FOOTAGE	15,000 - 17,499	694,509	3,307,832	2,817,386	6,819,727	16,151	16,057	16,099	16,084
COSTS $		198,581,436	940,693,341	611,135,507	1,750,410,334	4,618,174	4,566,473	3,492,203	4,128,326
WELLS		9	89	69	167				
FOOTAGE	17,500 - 19,999	166,015	1,638,698	1,275,370	3,080,083	18,446	18,412	18,484	18,444
COSTS $		60,703,155	672,305,018	497,032,321	1,230,040,494	6,744,795	7,553,989	7,203,367	7,365,512
WELLS		1	27	32	60				
FOOTAGE	20,000 & OVER	26,805	579,911	713,315	1,320,031	26,805	21,478	22,291	22,001
COSTS $		14,020,423	382,636,065	453,533,239	850,189,727	14,020,423	14,171,706	14,172,914	14,169,829
TOTAL WELLS		33,026	12,626	20,614	66,266				
TOTAL FOOTAGE		126,511,431	69,362,851	92,519,594	288,393,926	3,831	5,494	4,488	4,352
TOTAL COSTS $		8,004,608,792	6,642,729,531	5,496,480,339	20,143,818,652	242,373	526,115	266,638	303,984

* Includes the following states and areas which are not shown separately: Arizona, Georgia, Idaho, Missouri, Nevada, Oregon, South Dakota, Tennessee, Virginia and Washington. Note: Includes Alaska-Onshore.

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ALABAMA

Table 5

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	1	4	5				
FOOTAGE	0 - 1,249	--	1,152	956	2,108	--	1,152	239	422
COSTS $		--	126,720	108,029	234,749	--	126,720	27,007	46,950
WELLS		18	21	25	64				
FOOTAGE	1,250 - 2,499	42,170	40,204	50,250	132,624	2,343	1,914	2,010	2,072
COSTS $		2,469,712	4,007,233	3,184,433	9,661,378	137,206	190,821	127,377	150,959
WELLS		1	28	23	52				
FOOTAGE	2,500 - 3,749	2,865	83,377	68,910	155,152	2,865	2,978	2,996	2,984
COSTS $		274,954	5,087,336	3,053,990	8,416,280	274,954	181,691	132,782	161,852
WELLS		1	17	8	26				
FOOTAGE	3,750 - 4,999	3,828	80,166	37,053	121,047	3,828	4,716	4,632	4,656
COSTS $		258,084	5,764,690	1,736,732	7,759,506	258,084	339,099	217,092	298,443
WELLS		--	2	9	11				
FOOTAGE	5,000 - 7,499	--	10,081	50,562	60,643	--	5,041	5,618	5,513
COSTS $		--	692,098	2,687,139	3,379,237	--	346,049	298,571	307,203
WELLS		--	--	1	1				
FOOTAGE	7,500 - 9,999	--	--	8,581	8,581	--	--	8,581	8,581
COSTS $		--	--	440,463	440,463	--	--	440,463	440,463
WELLS		1	--	4	5				
FOOTAGE	10,000 - 12,499	11,370	--	45,831	57,201	11,370	--	11,458	11,440
COSTS $		1,341,660	--	2,375,864	3,717,524	1,341,660	--	593,966	743,505
WELLS		2	1	13	16				
FOOTAGE	12,500 - 14,999	25,784	14,310	179,977	220,071	12,892	14,310	13,844	13,754
COSTS $		3,689,192	5,080,050	13,637,784	22,407,026	1,844,596	5,080,050	1,049,060	1,400,439
WELLS		1	5	11	17				
FOOTAGE	15,000 - 17,499	15,550	79,824	174,719	270,093	15,550	15,965	15,884	15,888
COSTS $		2,675,142	31,367,003	17,551,378	51,593,523	2,675,142	6,273,401	1,595,580	3,034,913
WELLS		1	1	5	7				
FOOTAGE	17,500 - 19,999	18,245	18,650	92,516	129,411	18,245	18,650	18,503	18,487
COSTS $		11,438,393	9,698,000	13,931,766	40,068,159	11,438,393	9,698,000	3,786,353	5,724,023
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		25	76	103	204				
TOTAL FOOTAGE		119,812	327,764	709,355	1,156,931	4,792	4,313	6,887	5,671
TOTAL COSTS $		22,147,137	61,823,130	63,707,578	147,677,845	885,886	813,462	618,520	723,911

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ALASKA - TOTAL

Table 6

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	2,500 - 3,749	--	--	2,700	2,700	--	--	2,700	2,700
COSTS $		--	--	784,330	784,330	--	--	784,330	784,330
WELLS		1	--	--	1				
FOOTAGE	3,750 - 4,999	4,100	--	--	4,100	4,100	--	--	4,100
COSTS $		2,923,548	--	--	2,923,548	2,923,548	--	--	2,923,548
WELLS		15	--	--	15				
FOOTAGE	5,000 - 7,499	105,918	--	--	105,918	7,061	--	--	7,061
COSTS $		29,002,516	--	--	29,002,516	1,933,501	--	--	1,933,501
WELLS		85	--	2	87				
FOOTAGE	7,500 - 9,999	766,568	--	17,540	784,108	9,018	--	8,770	9,013
COSTS $		220,091,198	--	9,752,999	229,844,197	2,589,308	--	4,876,500	2,641,887
WELLS		70	--	--	70				
FOOTAGE	10,000 - 12,499	769,820	--	--	769,820	10,997	--	--	10,997
COSTS $		235,478,927	--	--	235,478,927	3,363,985	--	--	3,363,985
WELLS		5	--	3	8				
FOOTAGE	12,500 - 14,999	65,139	--	40,644	105,783	13,028	--	13,548	13,223
COSTS $		30,891,176	--	47,018,772	77,909,948	6,178,235	--	15,672,924	9,738,744
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	16,527	16,527	--	--	16,527	16,527
COSTS $		--	--	45,215,968	45,215,968	--	--	45,215,969	45,215,969
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	17,810	17,810	--	--	17,810	17,810
COSTS $		--	--	36,850,836	36,850,836	--	--	36,850,836	36,850,836
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		176	--	8	184				
TOTAL FOOTAGE		1,711,545	--	95,221	1,806,766	9,725	--	11,903	9,819
TOTAL COSTS $		518,387,365	--	139,622,905	658,010,270	2,945,383	--	17,452,864	3,576,143

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ALASKA - ONSHORE

Table 7

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	2,500 - 3,749	--	--	2,700	2,700	--	--	2,700	2,700
COSTS $		--	--	784,330	784,330	--	--	784,330	784,330
WELLS		1	--	--	1				
FOOTAGE	3,750 - 4,999	4,100	--	--	4,100	4,100	--	--	4,100
COSTS $		2,923,548	--	--	2,923,548	2,923,548	--	--	2,923,548
WELLS		15	--	--	15				
FOOTAGE	5,000 - 7,499	105,918	--	--	105,918	7,061	--	--	7,061
COSTS $		29,002,516	--	--	29,002,516	1,933,501	--	--	1,933,501
WELLS		84	--	2	86				
FOOTAGE	7,500 - 9,999	756,763	--	17,540	774,303	9,009	--	8,770	9,004
COSTS $		215,544,087	--	9,752,999	225,297,086	2,566,001	--	4,876,500	2,619,734
WELLS		69	--	--	69				
FOOTAGE	10,000 - 12,499	758,765	--	--	758,765	10,997	--	--	10,997
COSTS $		227,884,142	--	--	227,884,142	3,302,669	--	--	3,302,669
WELLS		4	--	3	7				
FOOTAGE	12,500 - 14,999	52,309	--	40,644	92,953	13,077	--	13,548	13,279
COSTS $		14,853,676	--	47,018,772	61,872,448	3,713,419	--	15,672,924	8,838,921
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	17,810	17,810	--	--	17,810	17,810
COSTS $		--	--	36,850,836	36,850,836	--	--	36,850,836	36,850,836
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		173	--	7	180				
TOTAL FOOTAGE		1,677,860	--	78,694	1,756,554	9,699	--	11,242	9,759
TOTAL COSTS $		490,207,969	--	94,406,937	584,614,906	2,833,572	--	13,486,705	3,247,861

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ALASKA - OFFSHORE

Table 8

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	2,500 - 3,749	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	3,750 - 4,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	5,000 - 7,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		1	--	--	1				
FOOTAGE	7,500 - 9,999	9,800	--	--	9,800	9,800	--	--	9,800
COSTS $		4,547,111	--	--	4,547,111	4,547,111	--	--	4,547,111
WELLS		1	--	--	1				
FOOTAGE	10,000 - 12,499	11,055	--	--	11,055	11,055	--	--	11,055
COSTS $		7,594,785	--	--	7,594,785	7,594,785	--	--	7,594,785
WELLS		1	--	--	1				
FOOTAGE	12,500 - 14,999	12,830	--	--	12,830	12,830	--	--	12,830
COSTS $		16,037,500	--	--	16,037,500	16,037,500	--	--	16,037,500
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	16,527	16,527	--	--	16,527	16,527
COSTS $		--	--	45,215,968	45,215,968	--	--	45,215,968	45,215,968
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		3	--	1	4				
TOTAL FOOTAGE		33,685	--	16,527	50,212	11,228	--	16,527	12,553
TOTAL COSTS $		28,179,396	--	45,215,968	73,395,364	9,393,132	--	45,215,968	18,348,842

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ARKANSAS

Table 9

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		2	20	23	45				
FOOTAGE	0 - 1,249	2,375	11,074	15,241	28,690	1,188	554	663	638
COSTS $		210,565	1,733,409	320,132	2,264,106	105,283	86,670	13,919	50,313
WELLS		74	10	16	100				
FOOTAGE	1,250 - 2,499	165,303	23,249	30,552	219,104	2,234	2,325	1,910	2,191
COSTS $		4,846,851	1,727,799	635,282	7,209,932	65,498	172,780	39,705	72,099
WELLS		112	19	99	230				
FOOTAGE	2,500 - 3,749	340,496	56,361	310,934	707,791	3,040	2,966	3,141	3,077
COSTS $		8,717,904	3,770,611	7,203,266	19,691,781	77,838	198,453	72,760	85,616
WELLS		42	23	67	132				
FOOTAGE	3,750 - 4,999	180,653	102,987	237,591	571,231	4,301	4,478	4,292	4,328
COSTS $		4,552,251	6,794,393	8,259,138	19,605,782	108,387	295,408	123,271	148,529
WELLS		39	92	94	225				
FOOTAGE	5,000 - 7,499	244,713	564,561	584,253	1,393,527	6,275	6,137	6,215	6,193
COSTS $		9,793,702	49,570,791	22,168,078	81,532,571	251,121	538,813	235,831	362,367
WELLS		45	24	32	101				
FOOTAGE	7,500 - 9,999	376,281	196,512	268,355	841,148	8,362	8,188	8,386	8,328
COSTS $		21,309,784	20,632,144	15,988,237	57,930,165	473,551	859,673	499,632	573,566
WELLS		2	6	12	20				
FOOTAGE	10,000 - 12,499	21,780	66,228	128,918	216,926	10,890	11,038	10,743	10,846
COSTS $		2,206,277	5,114,152	10,506,244	17,826,673	1,103,139	852,359	875,520	891,334
WELLS		--	--	1	1				
FOOTAGE	12,500 - 14,999	--	--	12,887	12,887	--	--	12,887	12,887
COSTS $		--	--	4,373,636	4,373,636	--	--	4,373,636	4,373,636
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	17,035	17,035	--	--	17,035	17,035
COSTS $		--	--	6,084,040	6,084,040	--	--	6,084,040	6,084,040
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		316	194	345	855				
TOTAL FOOTAGE		1,331,601	1,020,972	1,655,766	4,008,339	4,214	5,263	4,799	4,688
TOTAL COSTS $		51,637,334	89,343,299	75,538,053	216,518,686	163,409	460,532	218,951	253,238

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA - TOTAL

Table 10

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		561	1	15	577				
FOOTAGE	0 - 1,249	542,617	1,220	11,805	555,642	967	1,220	787	963
COSTS $		43,577,294	160,308	986,935	44,724,537	77,678	160,308	65,796	77,512
WELLS		707	2	21	730				
FOOTAGE	1,250 - 2,499	1,205,912	3,440	35,005	1,244,357	1,706	1,720	1,667	1,705
COSTS $		97,872,037	199,630	2,017,253	100,088,920	138,433	99,815	96,060	137,108
WELLS		295	2	30	327				
FOOTAGE	2,500 - 3,749	870,277	6,527	93,031	969,835	2,950	3,264	3,101	2,966
COSTS $		94,481,136	2,374,012	6,064,402	102,919,550	320,275	1,187,006	202,147	314,739
WELLS		131	16	22	169				
FOOTAGE	3,750 - 4,999	579,033	70,536	96,396	745,965	4,420	4,409	4,382	4,414
COSTS $		115,424,064	10,506,943	4,512,311	130,443,318	881,100	656,684	205,105	771,854
WELLS		138	32	73	243				
FOOTAGE	5,000 - 7,499	837,898	201,667	452,998	1,492,563	6,072	6,302	6,205	6,142
COSTS $		123,923,209	13,490,849	26,323,687	168,737,745	897,994	577,839	360,598	694,394
WELLS		57	25	57	139				
FOOTAGE	7,500 - 9,999	475,420	216,566	487,848	1,179,834	8,341	8,663	8,559	8,488
COSTS $		84,047,741	20,472,804	118,244,671	222,765,216	1,474,522	818,912	2,074,468	1,602,628
WELLS		14	14	21	49				
FOOTAGE	10,000 - 12,499	152,593	154,145	234,589	541,327	10,900	11,010	11,171	11,047
COSTS $		42,438,443	47,496,772	60,512,429	150,447,644	3,031,317	3,392,627	2,881,544	3,070,360
WELLS		11	2	13	26				
FOOTAGE	12,500 - 14,999	146,914	27,060	173,423	347,397	13,356	13,530	13,340	13,361
COSTS $		56,623,087	7,862,243	52,783,739	117,269,069	5,147,554	3,931,122	4,060,288	4,510,349
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	16,500	16,500	--	--	16,500	16,500
COSTS $		--	--	6,847,233	6,847,233	--	--	6,847,233	6,847,233
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	20,000 & OVER	--	--	20,805	20,805	--	--	20,805	20,805
COSTS $		--	--	17,215,872	17,215,872	--	--	17,215,873	17,215,873
TOTAL WELLS		1,914	94	254	2,262				
TOTAL FOOTAGE		4,810,664	681,161	1,622,400	7,114,225	2,513	7,246	6,387	3,145
TOTAL COSTS $		658,387,011	107,563,561	295,508,532	1,061,459,104	343,985	1,144,293	1,163,419	469,257

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA - NORTH

Table 11

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	1	1	2				
FOOTAGE	0 - 1,249	--	1,220	1,000	2,220	--	1,220	1,000	1,110
COSTS $		--	160,308	186,150	346,458	--	160,308	186,150	173,229
WELLS		--	1	2	3				
FOOTAGE	1,250 - 2,499	--	2,000	4,142	6,142	--	2,000	2,071	2,047
COSTS $		--	91,078	409,818	500,896	--	91,078	204,909	166,965
WELLS		1	1	15	17				
FOOTAGE	2,500 - 3,749	2,532	3,500	49,751	55,783	2,532	3,500	3,317	3,281
COSTS $		220,284	351,560	1,954,299	2,526,143	220,284	351,560	130,287	148,597
WELLS		--	14	12	26				
FOOTAGE	3,750 - 4,999	--	61,887	52,570	114,457	--	4,421	4,381	4,402
COSTS $		--	5,494,148	1,692,428	7,186,576	--	392,439	141,036	276,407
WELLS		2	29	46	77				
FOOTAGE	5,000 - 7,499	13,875	183,475	288,545	485,895	6,938	6,327	6,273	6,310
COSTS $		752,996	14,671,766	10,305,788	25,730,550	376,498	505,923	224,039	334,163
WELLS		1	25	29	55				
FOOTAGE	7,500 - 9,999	8,043	216,566	246,108	470,717	8,043	8,663	8,486	8,558
COSTS $		408,135	20,472,804	11,587,685	32,468,624	408,135	818,912	399,575	590,339
WELLS		--	11	8	19				
FOOTAGE	10,000 - 12,499	--	118,364	85,212	203,576	--	10,760	10,652	10,715
COSTS $		--	14,367,157	6,618,127	20,985,284	--	1,306,105	827,266	1,104,489
WELLS		--	1	3	4				
FOOTAGE	12,500 - 14,999	--	12,540	39,056	51,596	--	12,540	13,019	12,899
COSTS $		--	2,535,549	4,836,516	7,372,065	--	2,535,549	1,612,172	1,843,016
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		4	83	116	203				
TOTAL FOOTAGE		24,450	599,552	766,384	1,390,386	6,113	7,224	6,607	6,849
TOTAL COSTS $		1,381,415	58,144,370	37,590,811	97,116,596	345,354	700,535	324,059	478,407

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA -CENTRAL COASTAL

Table 12

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		4	--	1	5				
FOOTAGE	0 - 1,249	3,929	--	1,100	5,029	982	--	1,100	1,006
COSTS $		444,569	--	38,446	483,015	111,142	--	38,446	96,603
WELLS		38	--	3	41				
FOOTAGE	1,250 - 2,499	84,814	--	5,547	90,361	2,232	--	1,849	2,204
COSTS $		7,182,076	--	445,530	7,627,606	189,002	--	148,510	186,039
WELLS		40	--	7	47				
FOOTAGE	2,500 - 3,749	116,026	--	19,651	135,677	2,901	--	2,807	2,887
COSTS $		12,871,788	--	2,495,586	15,367,374	321,795	--	356,512	326,965
WELLS		13	--	1	14				
FOOTAGE	3,750 - 4,999	54,762	--	4,004	58,766	4,212	--	4,004	4,198
COSTS $		7,967,537	--	645,129	8,612,666	612,887	--	645,129	615,190
WELLS		47	--	9	56				
FOOTAGE	5,000 - 7,499	280,499	--	55,852	336,351	5,968	--	6,206	6,006
COSTS $		32,337,321	--	8,036,019	40,373,340	688,028	--	892,891	720,953
WELLS		5	--	3	8				
FOOTAGE	7,500 - 9,999	41,477	--	27,439	68,916	8,295	--	9,146	8,615
COSTS $		4,980,078	--	10,976,068	15,956,146	996,016	--	3,658,689	1,994,518
WELLS		3	--	2	5				
FOOTAGE	10,000 - 12,499	34,096	--	22,650	56,746	11,365	--	11,325	11,349
COSTS $		8,282,446	--	3,192,791	11,475,237	2,760,815	--	1,596,396	2,295,048
WELLS		--	--	1	1				
FOOTAGE	12,500 - 14,999	--	--	14,062	14,062	--	--	14,062	14,062
COSTS $		--	--	4,229,517	4,229,517	--	--	4,229,517	4,229,517
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		150	--	27	177				
TOTAL FOOTAGE		615,603	--	150,305	765,908	4,104	--	5,567	4,327
TOTAL COSTS $		74,065,815	--	30,059,086	104,124,901	493,772	--	1,113,300	588,276

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA - EAST CENTRAL

Table 13

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		554	--	11	565				
FOOTAGE	0 - 1,249	536,330	--	8,532	544,862	968	--	776	964
COSTS $		42,885,767	--	663,777	43,549,544	77,411	--	60,343	77,079
WELLS		633	1	16	650				
FOOTAGE	1,250 - 2,499	1,049,519	1,440	25,316	1,076,275	1,658	1,440	1,582	1,656
COSTS $		75,584,779	108,552	1,161,905	76,855,236	119,407	108,552	72,619	118,239
WELLS		226	--	7	233				
FOOTAGE	2,500 - 3,749	670,170	--	21,071	691,241	2,965	--	3,010	2,967
COSTS $		60,843,457	--	1,395,086	62,238,543	269,219	--	199,298	267,118
WELLS		63	--	9	72				
FOOTAGE	3,750 - 4,999	279,309	--	39,822	319,131	4,433	--	4,425	4,432
COSTS $		27,290,336	--	2,174,754	29,465,090	433,180	--	241,639	409,237
WELLS		40	3	17	60				
FOOTAGE	5,000 - 7,499	256,165	13,192	102,301	376,661	6,404	6,064	6,018	6,278
COSTS $		28,754,153	3,819,083	7,288,880	39,862,116	718,854	1,273,028	428,758	664,369
WELLS		32	--	17	49				
FOOTAGE	7,500 - 9,999	261,534	--	142,123	403,657	8,173	--	8,360	8,238
COSTS $		33,964,612	--	10,814,089	44,778,701	1,061,394	--	636,123	913,851
WELLS		5	--	5	10				
FOOTAGE	10,000 - 12,499	52,410	--	59,189	111,599	10,482	--	11,838	11,160
COSTS $		6,256,696	--	5,318,042	11,574,738	1,251,339	--	1,063,608	1,157,474
WELLS		9	--	7	16				
FOOTAGE	12,500 - 14,999	121,576	--	94,618	216,194	13,508	--	13,517	13,512
COSTS $		35,794,587	--	17,995,563	53,790,150	3,977,176	--	2,570,795	3,361,885
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,562	4	89	1,655				
TOTAL FOOTAGE		3,227,016	19,632	492,972	3,739,620	2,066	4,908	5,539	2,260
TOTAL COSTS $		311,374,387	3,927,635	46,812,096	362,114,118	199,343	981,909	525,979	218,800

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA - SOUTH

Table 14

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		3	--	2	5				
FOOTAGE	0 - 1,249	2,358	--	1,173	3,531	786	--	587	706
COSTS $		246,958	--	98,562	345,520	82,319	--	49,281	69,104
WELLS		34	--	--	34				
FOOTAGE	1,250 - 2,499	67,852	--	--	67,852	1,996	--	--	1,996
COSTS $		10,232,767	--	--	10,232,767	300,964	--	--	300,964
WELLS		25	--	1	26				
FOOTAGE	2,500 - 3,749	72,138	--	2,558	74,696	2,886	--	2,558	2,873
COSTS $		11,364,037	--	219,431	11,583,468	454,561	--	219,431	445,518
WELLS		29	--	--	29				
FOOTAGE	3,750 - 4,999	128,126	--	--	128,126	4,418	--	--	4,418
COSTS $		12,788,440	--	--	12,788,440	440,981	--	--	440,981
WELLS		24	--	1	25				
FOOTAGE	5,000 - 7,499	137,699	--	6,300	143,999	5,737	--	6,300	5,760
COSTS $		13,177,120	--	693,000	13,870,120	549,047	--	693,000	554,805
WELLS		3	--	1	4				
FOOTAGE	7,500 - 9,999	27,105	--	9,696	36,801	9,035	--	9,696	9,200
COSTS $		6,749,415	--	693,934	7,443,349	2,249,805	--	693,934	1,860,837
WELLS		2	--	2	4				
FOOTAGE	10,000 - 12,499	21,746	--	23,570	45,316	10,873	--	11,785	11,329
COSTS $		9,912,782	--	2,848,250	12,761,032	4,956,391	--	1,424,125	3,190,258
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		120	--	7	127				
TOTAL FOOTAGE		457,024	--	43,297	500,321	3,809	--	6,185	3,940
TOTAL COSTS $		64,471,519	--	4,553,177	69,024,696	537,263	--	650,454	543,502

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

CALIFORNIA - OFFSHORE

Table 15

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
		-----	-----	-----	-----	---	---	---	-----
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		2	--	--	2				
FOOTAGE	1,250 - 2,499	3,727	--	--	3,727	1,864	--	--	1,864
COSTS $		4,872,415	--	--	4,872,415	2,436,208	--	--	2,436,208
WELLS		3	1	--	4				
FOOTAGE	2,500 - 3,749	9,411	3,027	--	12,438	3,137	3,027	--	3,110
COSTS $		9,181,570	2,022,452	--	11,204,022	3,060,523	2,022,452	--	2,801,006
WELLS		26	2	--	28				
FOOTAGE	3,750 - 4,999	116,836	8,649	--	125,485	4,494	4,325	--	4,482
COSTS $		67,377,751	5,012,795	--	72,390,546	2,591,452	2,506,398	--	2,585,377
WELLS		25	--	--	25				
FOOTAGE	5,000 - 7,499	149,657	--	--	149,657	5,986	--	--	5,986
COSTS $		48,901,619	--	--	48,901,619	1,956,065	--	--	1,956,065
WELLS		16	--	7	23				
FOOTAGE	7,500 - 9,999	137,261	--	62,482	199,743	8,579	--	8,926	8,684
COSTS $		37,945,501	--	84,172,895	122,118,396	2,371,594	--	12,024,699	5,309,496
WELLS		4	3	4	11				
FOOTAGE	10,000 - 12,499	44,341	35,781	43,968	124,090	11,085	11,927	10,992	11,281
COSTS $		17,986,519	33,129,615	42,535,219	93,651,353	4,496,630	11,043,205	10,633,805	8,513,759
WELLS		2	1	2	5				
FOOTAGE	12,500 - 14,999	25,338	14,520	25,687	65,545	12,669	14,520	12,844	13,109
COSTS $		20,828,500	5,326,694	25,722,143	51,877,337	10,414,250	5,326,694	12,861,072	10,375,467
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	16,500	16,500	--	--	16,500	16,500
COSTS $		--	--	6,847,233	6,847,233	--	--	6,847,233	6,847,233
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	20,000 & OVER	--	--	20,805	20,805	--	--	20,805	20,805
COSTS $		--	--	17,215,872	17,215,872	--	--	17,215,873	17,215,873
TOTAL WELLS		78	7	15	100				
TOTAL FOOTAGE		486,571	61,977	169,442	717,990	6,238	8,854	11,296	7,180
TOTAL COSTS $		207,093,875	45,491,556	176,493,362	429,078,793	2,655,050	6,498,794	11,766,224	4,290,788

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

COLORADO

Table 16

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		8	6	27	41				
FOOTAGE	0 - 1,249	4,518	4,359	19,208	28,085	565	727	711	685
COSTS $		359,791	314,150	1,309,329	1,983,270	44,974	52,358	48,494	48,372
WELLS		7	23	23	53				
FOOTAGE	1,250 - 2,499	11,507	42,321	44,338	98,166	1,644	1,840	1,928	1,852
COSTS $		268,580	2,347,299	3,001,049	5,616,928	38,369	102,056	130,480	105,980
WELLS		16	77	33	126				
FOOTAGE	2,500 - 3,749	49,738	228,704	102,546	380,988	3,109	2,970	3,107	3,024
COSTS $		2,248,592	11,542,759	2,359,861	16,151,212	140,537	149,906	71,511	128,184
WELLS		37	15	87	139				
FOOTAGE	3,750 - 4,999	171,594	69,792	412,490	653,876	4,638	4,653	4,741	4,704
COSTS $		9,397,518	4,446,962	11,644,371	25,488,851	253,987	296,464	133,843	183,373
WELLS		263	112	277	652				
FOOTAGE	5,000 - 7,499	1,760,605	756,550	1,670,234	4,187,389	6,694	6,755	6,030	6,422
COSTS $		96,979,326	38,829,021	58,477,013	194,285,360	368,743	346,688	211,108	297,984
WELLS		109	209	67	385				
FOOTAGE	7,500 - 9,999	868,237	1,695,163	544,644	3,108,044	7,965	8,111	8,129	8,073
COSTS $		44,235,006	94,315,261	29,375,338	167,925,605	405,826	451,269	438,438	436,170
WELLS		--	--	2	2				
FOOTAGE	10,000 - 12,499	--	--	21,695	21,695	--	--	10,848	10,848
COSTS $		--	--	3,788,322	3,788,322	--	--	1,894,161	1,894,161
WELLS		--	--	1	1				
FOOTAGE	12,500 - 14,999	--	--	14,352	14,352	--	--	14,352	14,352
COSTS $		--	--	1,163,112	1,163,112	--	--	1,163,112	1,163,112
WELLS		--	1	--	1				
FOOTAGE	15,000 - 17,499	--	15,170	--	15,170	--	15,170	--	15,170
COSTS $		--	5,466,571	--	5,466,571	--	5,466,571	--	5,466,571
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		440	443	517	1,400				
TOTAL FOOTAGE		2,866,199	2,812,059	2,829,507	8,507,765	6,514	6,348	5,473	6,077
TOTAL COSTS $		153,488,813	157,262,023	111,118,395	421,869,231	348,838	354,993	214,929	301,335

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

FLORIDA

Table 17

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	2,500 - 3,749	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	3,750 - 4,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	5,000 - 7,499	--	--	5,221	5,221	--	--	5,221	5,221
COSTS $		--	--	1,801,245	1,801,245	--	--	1,801,245	1,801,245
WELLS		--	--	1	1				
FOOTAGE	7,500 - 9,999	--	--	9,000	9,000	--	--	9,000	9,000
COSTS $		--	--	1,527,242	1,527,242	--	--	1,527,242	1,527,242
WELLS		2	--	6	8				
FOOTAGE	10,000 - 12,499	23,728	--	70,537	94,265	11,864	--	11,756	11,783
COSTS $		3,574,000	--	7,245,141	10,819,141	1,787,000	--	1,207,524	1,352,393
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		3	--	4	7				
FOOTAGE	15,000 - 17,499	48,163	--	63,181	111,344	16,054	--	15,795	15,906
COSTS $		10,640,000	--	8,191,437	18,831,437	3,546,667	--	2,047,859	2,690,205
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	17,800	17,800	--	--	17,800	17,800
COSTS $		--	--	14,790,346	14,790,346	--	--	14,790,346	14,790,346
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		5	--	13	18				
TOTAL FOOTAGE		71,891	--	165,739	237,630	14,378	--	12,749	13,202
TOTAL COSTS $		14,214,000	--	33,555,411	47,769,411	2,842,800	--	2,581,186	2,653,856

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

ILLINOIS

Table 18

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		334	15	379	728				
FOOTAGE	0 - 1,249	264,230	8,696	259,891	532,817	791	580	686	732
COSTS $		11,601,713	280,533	5,298,915	17,181,161	34,736	18,702	13,981	23,600
WELLS		355	--	161	516				
FOOTAGE	1,250 - 2,499	644,268	--	310,211	954,479	1,815	--	1,927	1,850
COSTS $		32,067,530	--	5,564,722	37,632,252	90,331	--	34,563	72,931
WELLS		729	2	421	1,152				
FOOTAGE	2,500 - 3,749	2,312,198	6,180	1,334,122	3,652,500	3,172	3,090	3,169	3,171
COSTS $		83,342,113	187,021	25,021,403	108,550,537	114,324	93,511	59,433	94,228
WELLS		174	--	112	286				
FOOTAGE	3,750 - 4,999	714,002	--	464,104	1,178,106	4,103	--	4,144	4,119
COSTS $		26,975,614	--	9,593,275	36,568,889	155,032	--	85,654	127,863
WELLS		5	--	9	14				
FOOTAGE	5,000 - 7,499	27,498	--	51,409	78,907	5,500	--	5,712	5,636
COSTS $		1,723,080	--	1,400,192	3,123,272	344,616	--	155,577	223,091
WELLS		--	--	--	--				
FOOTAGE	7,500 - 9,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,597	17	1,082	2,696				
TOTAL FOOTAGE		3,962,196	14,876	2,419,737	6,396,809	2,481	875	2,236	2,373
TOTAL COSTS $		155,710,050	467,554	46,878,507	203,056,111	97,502	27,503	43,326	75,318

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

INDIANA

Table 19

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		87	15	138	240				
FOOTAGE	0 - 1,249	82,584	13,962	127,602	224,148	949	931	925	934
COSTS $		2,632,687	606,902	3,392,708	6,632,297	30,261	40,460	24,585	27,635
WELLS		205	7	253	465				
FOOTAGE	1,250 - 2,499	369,878	11,399	456,978	838,255	1,804	1,628	1,806	1,803
COSTS $		9,390,546	582,257	9,017,885	18,990,688	45,808	33,180	35,644	40,840
WELLS		118	--	150	268				
FOOTAGE	2,500 - 3,749	337,771	--	432,197	769,968	2,862	--	2,881	2,873
COSTS $		8,552,561	--	8,037,444	16,590,005	72,479	--	53,583	61,903
WELLS		1	--	4	5				
FOOTAGE	3,750 - 4,999	4,144	--	17,200	21,344	4,144	--	4,300	4,269
COSTS $		115,037	--	720,389	835,426	115,037	--	180,097	167,085
WELLS		--	--	--	--				
FOOTAGE	5,000 - 7,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	7,500 - 9,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		411	22	545	978				
TOTAL FOOTAGE		794,377	25,361	1,033,977	1,853,715	1,933	1,153	1,897	1,895
TOTAL COSTS $		20,690,331	1,189,159	21,168,426	43,048,416	50,343	54,053	38,841	44,017

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

KANSAS

Table 20

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		995	98	234	1,327				
FOOTAGE	0 - 1,249	786,747	70,076	197,653	1,054,476	791	715	845	795
COSTS $		15,322,048	1,838,665	2,169,668	19,330,381	15,399	18,762	9,272	14,567
WELLS		406	39	216	661				
FOOTAGE	1,250 - 2,499	763,583	72,539	401,449	1,237,571	1,881	1,860	1,859	1,872
COSTS $		18,460,415	2,156,072	5,144,600	25,761,087	45,469	55,284	23,818	38,973
WELLS		1,122	82	1,069	2,273				
FOOTAGE	2,500 - 3,749	3,702,078	252,578	3,608,489	7,563,145	3,300	3,080	3,376	3,327
COSTS $		123,786,408	11,546,427	61,801,174	197,134,009	110,327	140,810	57,812	86,729
WELLS		779	95	1,125	1,999				
FOOTAGE	3,750 - 4,999	3,328,762	425,097	4,823,037	8,576,896	4,273	4,475	4,287	4,291
COSTS $		128,849,843	16,233,521	94,069,070	239,152,434	165,404	170,879	83,617	119,636
WELLS		127	86	241	454				
FOOTAGE	5,000 - 7,499	714,103	487,135	1,321,549	2,522,787	5,623	5,664	5,484	5,557
COSTS $		35,207,681	22,089,393	34,905,397	92,202,471	277,226	256,853	144,836	203,089
WELLS		--	--	--	--				
FOOTAGE	7,500 - 9,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		3,429	400	2,885	6,714				
TOTAL FOOTAGE		9,295,273	1,307,425	10,352,177	20,954,875	2,711	3,269	3,588	3,121
TOTAL COSTS $		321,626,395	53,864,078	198,089,909	573,580,382	93,796	134,660	68,662	85,431

Table 21

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

KENTUCKY

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		685	48	627	1,360				
FOOTAGE	0 - 1,249	529,263	43,805	415,681	988,749	773	913	663	727
COSTS $		24,764,173	1,895,084	8,756,253	35,415,510	36,152	39,481	13,965	26,041
WELLS		492	86	887	1,465				
FOOTAGE	1,250 - 2,499	833,751	157,728	1,602,538	2,594,017	1,695	1,834	1,807	1,771
COSTS $		30,342,394	7,779,690	28,631,043	66,753,127	61,672	90,462	32,279	45,565
WELLS		49	39	96	184				
FOOTAGE	2,500 - 3,749	141,029	122,514	272,698	536,241	2,878	3,141	2,841	2,914
COSTS $		3,847,648	6,965,654	9,394,715	20,208,017	78,523	178,607	97,862	109,826
WELLS		7	15	2	24				
FOOTAGE	3,750 - 4,999	28,636	61,784	8,302	93,722	4,091	4,119	4,151	4,113
COSTS $		2,124,611	3,463,469	570,124	6,158,204	303,516	230,898	285,062	256,592
WELLS		1	2	--	3				
FOOTAGE	5,000 - 7,499	5,424	10,575	--	15,999	5,424	5,288	--	5,333
COSTS $		654,188	599,579	--	1,253,767	654,188	299,790	--	417,922
WELLS		--	--	1	1				
FOOTAGE	7,500 - 9,999	--	--	8,300	8,300	--	--	8,300	8,300
COSTS $		--	--	946,200	946,200	--	--	946,200	946,200
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,234	190	1,613	3,037				
TOTAL FOOTAGE		1,538,103	396,406	2,307,519	4,242,028	1,246	2,086	1,431	1,397
TOTAL COSTS $		61,733,014	20,703,476	48,298,335	130,734,825	50,027	108,966	29,943	43,047

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

LOUISIANA - TOTAL

Table 22

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		457	15	32	504				
FOOTAGE	0 - 1,249	458,670	13,357	28,037	500,064	1,004	890	876	992
COSTS $		15,227,901	447,344	13,738,383	29,413,628	33,321	29,823	429,324	58,360
WELLS		439	383	163	985				
FOOTAGE	1,250 - 2,499	764,836	871,596	305,506	1,941,938	1,742	2,276	1,874	1,972
COSTS $		29,711,093	20,879,968	7,888,804	58,479,865	67,679	54,517	48,398	59,370
WELLS		229	99	273	601				
FOOTAGE	2,500 - 3,749	685,729	296,536	829,063	1,811,328	2,994	2,995	3,037	3,014
COSTS $		29,424,479	15,911,168	19,913,663	65,249,310	128,491	160,719	72,944	108,568
WELLS		88	31	156	275				
FOOTAGE	3,750 - 4,999	382,966	129,878	681,087	1,193,931	4,352	4,190	4,366	4,342
COSTS $		27,788,918	14,763,797	20,599,520	63,152,235	315,783	476,252	132,048	229,644
WELLS		261	70	310	641				
FOOTAGE	5,000 - 7,499	1,592,414	435,067	1,924,367	3,951,848	6,101	6,215	6,208	6,165
COSTS $		156,467,956	69,206,206	132,220,595	357,894,757	599,494	988,660	426,519	558,338
WELLS		194	140	271	605				
FOOTAGE	7,500 - 9,999	1,714,383	1,250,490	2,369,889	5,334,762	8,837	8,932	8,745	8,818
COSTS $		307,217,008	193,035,615	229,484,942	729,737,565	1,583,593	1,378,826	846,808	1,206,178
WELLS		206	140	309	655				
FOOTAGE	10,000 - 12,499	2,295,398	1,565,162	3,454,558	7,315,118	11,143	11,180	11,180	11,168
COSTS $		460,683,231	297,685,984	370,728,981	1,129,098,196	2,236,326	2,126,329	1,199,770	1,723,814
WELLS		81	88	199	368				
FOOTAGE	12,500 - 14,999	1,096,067	1,197,093	2,689,549	4,982,714	13,532	13,603	13,515	13,540
COSTS $		303,572,744	338,086,532	481,523,526	1,123,182,802	3,747,812	3,841,393	2,419,716	3,052,127
WELLS		29	52	90	171				
FOOTAGE	15,000 - 17,499	463,146	827,744	1,446,249	2,737,139	15,971	15,918	16,069	16,007
COSTS $		181,512,225	280,121,493	379,466,753	841,100,471	6,259,042	5,386,952	4,216,298	4,918,716
WELLS		--	25	35	60				
FOOTAGE	17,500 - 19,999	--	461,946	643,627	1,105,573	--	18,478	18,389	18,426
COSTS $		--	221,379,734	245,652,544	467,032,278	--	8,855,189	7,018,644	7,783,872
WELLS		1	3	5	9				
FOOTAGE	20,000 & OVER	20,000	61,870	104,099	185,969	20,000	20,623	20,820	20,663
COSTS $		13,048,065	41,950,522	67,144,993	122,143,580	13,048,065	13,983,507	13,428,999	13,571,509
TOTAL WELLS		1,985	1,046	1,843	4,874				
TOTAL FOOTAGE		9,473,609	7,110,744	14,476,031	31,060,384	4,773	6,798	7,855	6,373
TOTAL COSTS $		1,524,653,620	1,493,463,363	1,968,362,704	4,986,484,687	768,087	1,427,790	1,068,021	1,023,079

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

LOUISIANA - NORTH

Table 23

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		456	15	22	493				
FOOTAGE	0 - 1,249	457,455	13,357	19,042	489,854	1,003	890	866	994
COSTS $		15,091,975	447,344	512,989	16,052,308	33,096	29,823	23,318	32,560
WELLS		405	383	153	941				
FOOTAGE	1,250 - 2,499	701,510	871,596	286,728	1,859,834	1,732	2,276	1,874	1,976
COSTS $		23,200,877	20,879,968	4,495,532	48,576,377	57,286	54,517	29,383	51,622
WELLS		209	92	262	563				
FOOTAGE	2,500 - 3,749	623,518	274,433	792,563	1,690,514	2,983	2,983	3,025	3,003
COSTS $		23,719,378	10,330,787	11,326,321	45,376,486	113,490	112,291	43,230	80,598
WELLS		50	22	138	210				
FOOTAGE	3,750 - 4,999	214,913	90,229	602,094	907,236	4,298	4,101	4,363	4,320
COSTS $		9,561,569	4,237,681	9,186,625	22,985,875	191,231	192,622	66,570	109,457
WELLS		144	25	210	379				
FOOTAGE	5,000 - 7,499	879,683	155,341	1,287,851	2,322,875	6,109	6,214	6,133	6,129
COSTS $		48,001,855	9,843,025	23,460,325	81,305,205	333,346	393,721	111,716	214,526
WELLS		23	49	60	132				
FOOTAGE	7,500 - 9,999	194,918	435,888	515,241	1,146,047	8,475	8,896	8,587	8,682
COSTS $		14,530,969	38,177,924	21,066,418	73,775,311	631,781	779,141	351,107	558,904
WELLS		11	36	27	74				
FOOTAGE	10,000 - 12,499	120,269	393,300	291,115	805,184	10,934	10,939	10,782	10,881
COSTS $		15,172,526	55,679,202	18,775,845	89,627,573	1,379,321	1,546,645	695,402	1,211,183
WELLS		--	6	10	16				
FOOTAGE	12,500 - 14,999	--	81,557	133,544	215,101	--	13,593	13,354	13,444
COSTS $		--	18,718,863	18,519,600	37,238,463	--	3,119,811	1,851,960	2,327,404
WELLS		--	1	2	3				
FOOTAGE	15,000 - 17,499	--	15,642	31,520	47,162	--	15,642	15,760	15,721
COSTS $		--	5,430,120	9,106,115	14,536,235	--	5,430,120	4,553,058	4,845,412
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	19,095	19,095	--	--	19,095	19,095
COSTS $		--	--	7,047,055	7,047,055	--	--	7,047,055	7,047,055
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,298	629	885	2,812				
TOTAL FOOTAGE		3,192,266	2,331,843	3,978,793	9,502,902	2,459	3,707	4,496	3,379
TOTAL COSTS $		149,279,149	163,744,914	123,496,825	436,520,888	115,007	260,326	139,544	155,235

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

LOUISIANA - SOUTH

Table 24

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		1	--	6	7				
FOOTAGE	0 - 1,249	1,215	--	5,470	6,685	1,215	--	912	955
COSTS $		135,926	--	1,723,122	1,859,048	135,926	--	287,187	265,578
WELLS		34	--	7	41				
FOOTAGE	1,250 - 2,499	63,326	--	13,364	76,690	1,863	--	1,909	1,870
COSTS $		6,510,216	--	1,573,233	8,083,449	191,477	--	224,748	197,157
WELLS		20	5	8	33				
FOOTAGE	2,500 - 3,749	62,211	15,333	26,081	103,625	3,111	3,067	3,260	3,140
COSTS $		5,705,101	3,072,174	2,943,894	11,721,169	285,255	614,435	367,987	355,187
WELLS		33	3	10	46				
FOOTAGE	3,750 - 4,999	146,210	13,429	44,401	204,040	4,431	4,476	4,440	4,436
COSTS $		11,967,994	1,222,742	2,455,716	15,646,452	362,667	407,581	245,572	340,140
WELLS		54	12	35	101				
FOOTAGE	5,000 - 7,499	318,372	76,499	219,256	614,127	5,896	6,375	6,264	6,080
COSTS $		26,795,878	6,295,514	10,454,670	43,546,062	496,220	524,626	298,705	431,149
WELLS		75	44	135	254				
FOOTAGE	7,500 - 9,999	673,774	398,047	1,190,020	2,261,841	8,984	9,047	8,815	8,905
COSTS $		67,088,896	40,265,093	63,267,735	170,621,724	894,519	915,116	468,650	671,739
WELLS		91	61	201	353				
FOOTAGE	10,000 - 12,499	993,972	678,118	2,249,503	3,921,593	10,923	11,117	11,192	11,109
COSTS $		118,198,242	91,596,526	150,844,104	360,638,872	1,298,882	1,501,582	750,468	1,021,640
WELLS		36	43	127	206				
FOOTAGE	12,500 - 14,999	492,109	591,183	1,707,003	2,790,300	13,670	13,749	13,441	13,545
COSTS $		90,898,822	116,806,666	173,469,590	381,175,078	2,524,967	2,716,434	1,365,902	1,850,365
WELLS		13	29	56	98				
FOOTAGE	15,000 - 17,499	209,366	460,790	900,801	1,570,957	16,105	15,889	16,086	16,030
COSTS $		60,614,504	126,706,676	151,156,227	338,477,407	4,662,654	4,369,196	2,699,218	3,453,851
WELLS		--	20	24	44				
FOOTAGE	17,500 - 19,999	--	373,118	443,733	816,851	--	18,656	18,489	18,565
COSTS $		--	179,528,071	150,274,477	329,802,548	--	8,976,404	6,261,437	7,495,513
WELLS		--	3	4	7				
FOOTAGE	20,000 & OVER	--	61,870	83,560	145,430	--	20,623	20,890	20,776
COSTS $		--	41,950,522	55,527,290	97,477,812	--	13,983,507	13,881,823	13,925,402
TOTAL WELLS		357	220	613	1,190				
TOTAL FOOTAGE		2,960,555	2,668,392	6,883,192	12,512,139	8,293	12,129	11,229	10,514
TOTAL COSTS $		387,915,579	607,443,984	763,690,058	1,759,049,621	1,086,598	2,761,109	1,245,824	1,478,193

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

LOUISIANA - OFFSHORE

Table 25

DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
	OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS	--	--	4	4				
FOOTAGE 0 - 1,249	--	--	3,525	3,525	--	--	881	881
COSTS $	--	--	11,502,272	11,502,272	--	--	2,875,568	2,875,568
WELLS	--	--	3	3				
FOOTAGE 1,250 - 2,499	--	--	5,414	5,414	--	--	1,805	1,805
COSTS $	--	--	1,820,039	1,820,039	--	--	606,680	606,680
WELLS	--	2	3	5				
FOOTAGE 2,500 - 3,749	--	6,770	10,419	17,189	--	3,385	3,473	3,438
COSTS $	--	2,508,207	5,643,448	8,151,655	--	1,254,104	1,881,149	1,630,331
WELLS	5	6	8	19				
FOOTAGE 3,750 - 4,999	21,843	26,220	34,592	82,655	4,369	4,370	4,324	4,350
COSTS $	6,259,355	9,303,374	8,957,179	24,519,908	1,251,871	1,550,562	1,119,647	1,290,522
WELLS	63	33	65	161				
FOOTAGE 5,000 - 7,499	394,359	203,227	417,260	1,014,846	6,260	6,158	6,419	6,303
COSTS $	81,670,223	53,067,667	98,305,600	233,043,490	1,296,353	1,608,111	1,512,394	1,447,475
WELLS	96	47	76	219				
FOOTAGE 7,500 - 9,999	845,691	416,555	664,628	1,926,874	8,809	8,863	8,745	8,799
COSTS $	225,597,143	114,592,598	145,150,789	485,340,530	2,349,970	2,438,141	1,909,879	2,216,167
WELLS	104	43	81	228				
FOOTAGE 10,000 - 12,499	1,181,157	493,244	913,940	2,588,341	11,357	11,471	11,283	11,352
COSTS $	327,312,463	150,410,256	201,109,032	678,831,751	3,147,235	3,497,913	2,482,828	2,977,332
WELLS	45	39	62	146				
FOOTAGE 12,500 - 14,999	603,958	524,353	849,002	1,977,313	13,421	13,445	13,694	13,543
COSTS $	212,673,922	202,561,003	289,534,336	704,769,261	4,726,087	5,193,872	4,669,909	4,827,187
WELLS	16	22	32	70				
FOOTAGE 15,000 - 17,499	253,780	351,312	513,928	1,119,020	15,861	15,969	16,060	15,986
COSTS $	120,897,721	147,984,697	219,204,411	488,086,829	7,556,108	6,726,577	6,850,138	6,972,669
WELLS	--	5	10	15				
FOOTAGE 17,500 - 19,999	--	88,828	180,799	269,627	--	17,766	18,080	17,975
COSTS $	--	41,851,663	88,331,012	130,182,675	--	8,370,333	8,833,101	8,678,845
WELLS	1	--	1	2				
FOOTAGE 20,000 & OVER	20,000	--	20,539	40,539	20,000	--	20,539	20,270
COSTS $	13,048,065	--	11,617,703	24,665,768	13,048,065	--	11,617,703	12,332,884
TOTAL WELLS	330	197	345	872				
TOTAL FOOTAGE	3,320,788	2,110,509	3,614,046	9,045,343	10,063	10,713	10,475	10,373
TOTAL COSTS $	987,458,892	722,279,465	1,081,175,821	2,790,914,178	2,992,300	3,666,393	3,133,843	3,200,590

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

MICHIGAN

Table 26

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		13	1	24	38				
FOOTAGE	0 - 1,249	10,441	710	23,347	34,498	803	710	973	908
COSTS $		809,404	52,959	1,063,068	1,925,431	62,262	52,959	44,295	50,669
WELLS		14	13	16	43				
FOOTAGE	1,250 - 2,499	29,783	21,224	27,255	78,262	2,127	1,633	1,703	1,820
COSTS $		1,665,241	1,256,243	1,474,494	4,395,978	118,946	96,634	92,156	102,232
WELLS		82	3	53	138				
FOOTAGE	2,500 - 3,749	271,913	10,363	172,953	455,229	3,316	3,454	3,263	3,299
COSTS $		14,005,927	457,543	8,498,477	22,961,947	170,804	152,514	160,349	166,391
WELLS		163	7	139	309				
FOOTAGE	3,750 - 4,999	720,420	32,446	607,612	1,360,478	4,420	4,635	4,371	4,403
COSTS $		47,985,458	2,927,071	29,251,072	80,163,601	294,389	418,153	210,439	259,429
WELLS		56	17	145	218				
FOOTAGE	5,000 - 7,499	339,613	108,932	903,223	1,351,768	6,065	6,408	6,229	6,201
COSTS $		22,751,480	8,228,384	40,124,991	71,104,855	406,276	484,023	276,724	326,169
WELLS		--	6	11	17				
FOOTAGE	7,500 - 9,999	--	49,253	89,876	139,129	--	8,209	8,171	3,184
COSTS $		--	5,040,356	5,814,415	10,854,771	--	840,059	528,583	638,516
WELLS		1	--	3	4				
FOOTAGE	10,000 - 12,499	11,800	--	32,928	44,728	11,800	--	10,976	11,182
COSTS $		647,448	--	2,670,406	3,317,854	647,448	--	890,135	829,464
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		329	47	391	767				
TOTAL FOOTAGE		1,383,970	222,928	1,857,194	3,464,092	4,207	4,743	4,750	4,516
TOTAL COSTS $		87,864,958	17,962,556	88,896,923	194,724,437	267,067	332,182	227,358	253,878

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

MISSISSIPPI

Table 27

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	3	2	5				
FOOTAGE	1,250 - 2,499	--	6,561	4,150	10,711	--	2,187	2,075	2,142
COSTS $		--	778,884	599,685	1,378,569	--	259,623	299,843	275,714
WELLS		2	2	10	14				
FOOTAGE	2,500 - 3,749	5,929	5,110	30,830	41,869	2,965	2,555	3,083	2,991
COSTS $		376,628	562,505	1,637,756	2,576,889	188,314	281,253	163,776	184,064
WELLS		24	5	42	71				
FOOTAGE	3,750 - 4,999	106,270	21,759	182,828	310,857	4,428	4,352	4,353	4,378
COSTS $		3,942,222	1,842,167	5,502,216	11,286,605	164,259	368,433	131,005	158,966
WELLS		51	11	173	235				
FOOTAGE	5,000 - 7,499	306,867	61,707	1,122,781	1,491,355	6,017	5,610	6,490	6,346
COSTS $		11,450,144	5,077,491	31,115,848	47,643,483	224,513	461,590	179,860	202,739
WELLS		17	1	41	59				
FOOTAGE	7,500 - 9,999	149,020	7,602	337,547	494,169	8,766	7,602	8,233	8,376
COSTS $		10,368,561	904,582	10,995,444	22,268,587	609,915	904,582	268,182	377,434
WELLS		33	1	54	88				
FOOTAGE	10,000 - 12,499	366,875	10,500	603,650	981,025	11,117	10,500	11,179	11,148
COSTS $		31,644,124	861,977	25,991,424	58,497,525	958,913	861,977	481,323	664,745
WELLS		13	5	17	35				
FOOTAGE	12,500 - 14,999	176,021	69,462	232,184	477,667	13,540	13,892	13,658	13,648
COSTS $		19,939,055	7,186,070	12,918,938	40,044,063	1,533,774	1,437,214	759,938	1,144,116
WELLS		2	13	20	35				
FOOTAGE	15,000 - 17,499	30,610	210,405	322,917	563,932	15,305	16,185	16,146	16,112
COSTS $		5,547,931	35,056,624	31,724,394	72,330,949	2,773,966	2,696,817	1,586,220	2,066,599
WELLS		1	2	2	5				
FOOTAGE	17,500 - 19,999	18,054	35,800	38,412	92,266	18,054	17,900	19,206	18,453
COSTS $		4,784,310	7,636,297	6,949,984	19,370,591	4,784,310	3,818,149	3,474,992	3,874,118
WELLS		--	1	3	4				
FOOTAGE	20,000 & OVER	--	22,350	68,514	90,864	--	22,350	22,838	22,716
COSTS $		--	17,753,504	75,192,171	92,945,675	--	17,753,505	25,064,059	23,236,419
TOTAL WELLS		143	44	364	551				
TOTAL FOOTAGE		1,159,646	451,256	2,943,813	4,554,715	8,109	10,256	8,087	8,266
TOTAL COSTS $		88,052,975	77,662,101	202,627,860	368,342,936	615,755	1,765,048	556,670	668,499

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

MONTANA

Table 28

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	9	15	24				
FOOTAGE	0 - 1,249	--	9,390	13,885	23,275	--	1,043	926	970
COSTS $		--	320,137	649,666	969,803	--	35,571	43,311	40,408
WELLS		63	59	68	190				
FOOTAGE	1,250 - 2,499	115,582	96,632	126,964	339,178	1,835	1,638	1,867	1,785
COSTS $		4,077,982	4,671,987	4,809,711	13,559,680	64,730	79,186	70,731	71,367
WELLS		29	4	33	66				
FOOTAGE	2,500 - 3,749	89,152	11,433	99,764	200,349	3,074	2,858	3,023	3,036
COSTS $		3,239,834	607,591	3,979,765	7,826,190	111,718	151,893	120,569	118,579
WELLS		9	--	22	31				
FOOTAGE	3,750 - 4,999	41,477	--	95,264	136,741	4,609	--	4,330	4,411
COSTS $		1,997,219	--	4,212,769	6,209,988	221,913	--	191,490	200,322
WELLS		18	--	36	54				
FOOTAGE	5,000 - 7,499	107,254	--	221,191	328,445	5,959	--	6,144	6,082
COSTS $		8,006,111	--	11,952,443	19,958,554	444,784	--	332,012	369,603
WELLS		21	--	38	59				
FOOTAGE	7,500 - 9,999	183,154	--	315,378	498,532	8,722	--	8,299	8,450
COSTS $		14,012,207	--	24,856,367	38,868,574	667,248	--	654,115	658,789
WELLS		21	1	20	42				
FOOTAGE	10,000 - 12,499	240,928	10,693	225,660	477,281	11,473	10,693	11,283	11,364
COSTS $		23,124,128	1,047,593	20,640,476	44,812,197	1,101,149	1,047,593	1,032,024	1,066,957
WELLS		11	--	8	19				
FOOTAGE	12,500 - 14,999	140,748	--	102,656	243,404	12,795	--	12,832	12,811
COSTS $		13,423,337	--	15,019,449	28,442,786	1,220,303	--	1,877,431	1,496,989
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	16,600	16,600	--	--	16,600	16,600
COSTS $		--	--	9,100,404	9,100,404	--	--	9,100,404	9,100,404
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		172	73	241	486				
TOTAL FOOTAGE		918,295	128,148	1,217,362	2,263,805	5,339	1,755	5,051	4,658
TOTAL COSTS $		67,880,818	6,647,308	95,220,050	169,748,176	394,656	91,059	395,104	349,276

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

NEBRASKA

Table 29

DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
	OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS	--	--	2	2				
FOOTAGE 0 - 1,249	--	--	2,172	2,172	--	--	1,086	1,086
COSTS $	--	--	98,080	98,080	--	--	49,040	49,040
WELLS	4	1	2	7				
FOOTAGE 1,250 - 2,499	9,192	2,325	3,565	15,082	2,298	2,325	1,783	2,155
COSTS $	302,610	65,696	134,149	502,455	75,653	65,696	67,075	71,779
WELLS	12	12	15	39				
FOOTAGE 2,500 - 3,749	42,235	39,114	51,058	132,407	3,520	3,260	3,404	3,395
COSTS $	2,087,498	1,236,202	1,299,396	4,623,096	173,958	103,017	86,626	118,541
WELLS	83	--	87	170				
FOOTAGE 3,750 - 4,999	346,538	--	382,038	728,576	4,175	--	4,391	4,286
COSTS $	15,289,998	--	6,096,688	21,386,686	184,217	--	70,077	125,804
WELLS	30	1	102	133				
FOOTAGE 5,000 - 7,499	191,986	6,530	640,422	838,938	6,400	6,530	6,279	6,308
COSTS $	7,154,410	158,091	11,635,517	18,948,018	238,480	158,091	114,074	142,466
WELLS	--	--	1	1				
FOOTAGE 7,500 - 9,999	--	--	7,544	7,544	--	--	7,544	7,544
COSTS $	--	--	252,293	252,293	--	--	252,293	252,293
WELLS	--	--	--	--				
FOOTAGE 10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $	--	--	--	--	--	--	--	--
WELLS	--	--	--	--				
FOOTAGE 12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $	--	--	--	--	--	--	--	--
WELLS	--	--	--	--				
FOOTAGE 15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $	--	--	--	--	--	--	--	--
WELLS	--	--	--	--				
FOOTAGE 17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $	--	--	--	--	--	--	--	--
WELLS	--	--	--	--				
FOOTAGE 20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $	--	--	--	--	--	--	--	--
TOTAL WELLS	129	14	209	352				
TOTAL FOOTAGE	589,951	47,969	1,086,799	1,724,719	4,573	3,426	5,200	4,900
TOTAL COSTS $	24,834,516	1,459,989	19,516,123	45,810,628	192,516	104,285	93,379	130,144

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

NEW MEXICO - TOTAL

Table 30

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		9	4	31	44				
FOOTAGE	0 - 1,249	8,884	3,637	19,274	31,795	987	909	622	723
COSTS $		716,893	79,506	1,845,102	2,641,501	79,655	19,877	59,519	60,034
WELLS		85	27	38	150				
FOOTAGE	1,250 - 2,499	151,042	47,789	68,847	267,678	1,777	1,770	1,812	1,785
COSTS $		10,263,443	1,825,655	3,101,446	15,190,544	120,746	67,617	81,617	101,270
WELLS		85	71	23	179				
FOOTAGE	2,500 - 3,749	269,047	222,022	72,332	563,401	3,165	3,127	3,145	3,147
COSTS $		19,911,285	14,364,917	3,560,035	37,836,237	234,250	202,323	154,784	211,376
WELLS		174	127	38	339				
FOOTAGE	3,750 - 4,999	755,307	540,796	167,245	1,463,348	4,341	4,258	4,401	4,317
COSTS $		49,823,850	31,991,905	10,938,989	92,754,744	286,344	251,905	287,868	273,613
WELLS		198	140	35	373				
FOOTAGE	5,000 - 7,499	1,209,510	909,508	215,780	2,334,798	6,109	6,496	6,165	6,260
COSTS $		84,321,482	56,194,846	14,411,177	154,927,505	425,866	401,392	411,748	415,355
WELLS		78	68	31	177				
FOOTAGE	7,500 - 9,999	647,607	557,278	274,760	1,479,645	8,303	8,195	8,863	8,360
COSTS $		44,937,634	31,632,120	21,637,397	98,207,151	576,124	465,178	697,981	554,843
WELLS		91	27	27	145				
FOOTAGE	10,000 - 12,499	961,414	302,871	300,180	1,564,465	10,565	11,217	11,118	10,789
COSTS $		68,683,833	31,181,365	17,949,603	117,814,801	754,767	1,154,865	664,800	812,516
WELLS		11	26	10	47				
FOOTAGE	12,500 - 14,999	145,047	343,701	136,056	624,804	13,186	13,219	13,606	13,294
COSTS $		15,416,283	49,588,461	14,865,072	79,869,816	1,401,480	1,907,249	1,486,507	1,699,358
WELLS		1	16	3	20				
FOOTAGE	15,000 - 17,499	15,997	249,375	47,320	312,692	15,997	15,586	15,773	15,635
COSTS $		2,979,238	43,657,635	6,674,076	53,310,949	2,979,238	2,728,602	2,224,692	2,665,548
WELLS		--	2	1	3				
FOOTAGE	17,500 - 19,999	--	36,132	19,375	55,507	--	18,066	19,375	18,502
COSTS $		--	9,495,846	15,306,250	24,802,096	--	4,747,923	15,306,250	8,267,366
WELLS		--	1	--	1				
FOOTAGE	20,000 & OVER	--	20,100	--	20,100	--	20,100	--	20,100
COSTS $		--	8,522,938	--	8,522,938	--	8,522,938	--	8,522,938
TOTAL WELLS		732	509	237	1,478				
TOTAL FOOTAGE		4,163,855	3,233,209	1,321,169	8,718,233	5,688	6,352	5,575	5,899
TOTAL COSTS $		297,053,941	278,535,194	110,289,147	685,878,282	405,811	547,220	465,355	464,058

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 31

NEW MEXICO - WEST

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		9	4	10	23				
FOOTAGE	0 - 1,249	8,884	3,637	7,173	19,694	987	909	717	856
COSTS $		716,893	79,506	241,522	1,037,921	79,655	19,877	24,152	45,127
WELLS		15	22	20	57				
FOOTAGE	1,250 - 2,499	26,094	38,490	33,290	97,874	1,740	1,750	1,665	1,717
COSTS $		1,078,592	1,358,379	790,278	3,227,249	71,906	61,745	39,514	56,618
WELLS		2	39	10	51				
FOOTAGE	2,500 - 3,749	5,590	117,468	31,759	154,817	2,795	3,012	3,176	3,036
COSTS $		253,459	6,107,856	1,113,615	7,474,930	126,730	156,612	111,362	146,567
WELLS		10	6	1	17				
FOOTAGE	3,750 - 4,999	46,216	25,394	4,001	75,611	4,622	4,232	4,001	4,448
COSTS $		2,532,374	1,608,450	1,561,249	5,702,073	253,237	268,075	1,561,249	335,416
WELLS		150	119	2	271				
FOOTAGE	5,000 - 7,499	919,256	781,651	11,136	1,712,043	6,128	6,568	5,568	6,318
COSTS $		64,401,765	47,775,208	722,420	112,899,393	429,345	401,472	361,210	416,603
WELLS		44	49	3	96				
FOOTAGE	7,500 - 9,999	348,805	386,327	24,410	759,542	7,927	7,884	8,137	7,912
COSTS $		25,666,249	19,948,697	4,214,544	49,829,490	583,324	407,116	1,404,848	519,057
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	19,375	19,375	--	--	19,375	19,375
COSTS $		--	--	15,306,250	15,306,250	--	--	15,306,250	15,306,250
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		230	239	47	516				
TOTAL FOOTAGE		1,354,845	1,352,967	131,144	2,838,956	5,891	5,661	2,790	5,502
TOTAL COSTS $		94,649,332	76,878,096	23,949,878	195,477,306	411,519	321,666	509,572	378,832

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

NEW MEXICO - EAST

Table 32

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	21	21				
FOOTAGE	0 - 1,249	--	--	12,101	12,101	--	--	576	576
COSTS $		--	--	1,603,580	1,603,580	--	--	76,361	76,361
WELLS		70	5	18	93				
FOOTAGE	1,250 - 2,499	124,948	9,299	35,557	169,804	1,785	1,860	1,975	1,826
COSTS $		9,184,851	467,276	2,311,168	11,963,295	131,212	93,455	128,398	128,638
WELLS		83	32	13	128				
FOOTAGE	2,500 - 3,749	263,457	104,554	40,573	408,584	3,174	3,267	3,121	3,192
COSTS $		19,657,826	8,257,061	2,446,420	30,361,307	236,841	258,033	188,186	237,198
WELLS		164	121	37	322				
FOOTAGE	3,750 - 4,999	709,091	515,402	163,244	1,387,737	4,324	4,260	4,412	4,310
COSTS $		47,291,476	30,383,455	9,377,740	87,052,671	288,363	251,103	253,452	270,350
WELLS		48	21	33	102				
FOOTAGE	5,000 - 7,499	290,254	127,857	204,644	622,755	6,047	6,088	6,201	6,105
COSTS $		19,919,717	8,419,638	13,688,757	42,028,112	414,994	400,935	414,811	412,040
WELLS		34	19	28	81				
FOOTAGE	7,500 - 9,999	298,802	170,951	250,350	720,103	8,788	8,997	8,941	8,890
COSTS $		19,271,385	11,683,423	17,422,853	48,377,661	566,805	614,917	622,245	597,255
WELLS		91	27	27	145				
FOOTAGE	10,000 - 12,499	961,414	302,871	300,180	1,564,465	10,565	11,217	11,118	10,789
COSTS $		68,683,833	31,181,365	17,949,603	117,814,801	754,767	1,154,865	664,800	812,516
WELLS		11	26	10	47				
FOOTAGE	12,500 - 14,999	145,047	343,701	136,056	624,804	13,186	13,219	13,606	13,294
COSTS $		15,416,283	49,588,461	14,865,072	79,869,816	1,401,480	1,907,249	1,486,507	1,699,358
WELLS		1	16	3	20				
FOOTAGE	15,000 - 17,499	15,997	249,375	47,320	312,692	15,997	15,586	15,773	15,635
COSTS $		2,979,238	43,657,635	6,674,076	53,310,949	2,979,238	2,728,602	2,224,692	2,665,547
WELLS		--	2	--	2				
FOOTAGE	17,500 - 19,999	--	36,132	--	36,132	--	18,066	--	18,066
COSTS $		--	9,495,846	--	9,495,846	--	4,747,923	--	4,747,923
WELLS		--	1	--	1				
FOOTAGE	20,000 & OVER	--	20,100	--	20,100	--	20,100	--	20,100
COSTS $		--	8,522,938	--	8,522,938	--	8,522,938	--	8,522,938
TOTAL WELLS		502	270	190	962				
TOTAL FOOTAGE		2,809,010	1,880,242	1,190,025	5,879,277	5,596	6,964	6,263	6,112
TOTAL COSTS $		202,404,609	201,657,098	86,339,269	490,400,976	403,196	746,878	454,417	509,772

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 33

NORTH DAKOTA

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	2	2				
FOOTAGE	0 - 1,249	--	--	956	956	--	--	478	478
COSTS $		--	--	96,211	96,211	--	--	48,106	48,106
WELLS		--	--	1	1				
FOOTAGE	1,250 - 2,499	--	--	2,308	2,308	--	--	2,308	2,308
COSTS $		--	--	170,476	170,476	--	--	170,476	170,476
WELLS		15	--	15	30				
FOOTAGE	2,500 - 3,749	48,517	--	49,997	98,514	3,234	--	3,333	3,284
COSTS $		2,411,901	--	2,033,271	4,445,172	160,793	--	135,551	148,172
WELLS		17	--	28	45				
FOOTAGE	3,750 - 4,999	74,670	--	120,081	194,751	4,392	--	4,289	4,328
COSTS $		3,669,368	--	3,747,868	7,417,236	215,845	--	133,852	164,827
WELLS		31	--	36	67				
FOOTAGE	5,000 - 7,499	193,336	--	223,347	416,683	6,237	--	6,204	6,219
COSTS $		11,089,799	--	8,142,779	19,232,578	357,735	--	226,188	287,053
WELLS		105	1	66	172				
FOOTAGE	7,500 - 9,999	984,966	9,512	594,109	1,588,587	9,381	9,512	9,002	9,236
COSTS $		80,718,098	602,886	33,824,718	115,145,702	768,744	602,886	512,496	669,452
WELLS		56	2	32	90				
FOOTAGE	10,000 - 12,499	617,635	24,591	356,866	999,092	11,029	12,296	11,152	11,101
COSTS $		63,690,680	3,569,517	21,485,450	88,745,647	1,137,334	1,784,759	671,420	986,063
WELLS		57	4	24	85				
FOOTAGE	12,500 - 14,999	770,817	55,017	322,419	1,148,253	13,523	13,754	13,434	13,509
COSTS $		94,465,709	10,146,046	35,530,839	140,142,594	1,657,293	2,536,512	1,480,452	1,648,736
WELLS		--	--	1	1				
FOOTAGE	15,000 - 17,499	--	--	15,897	15,897	--	--	15,897	15,897
COSTS $		--	--	1,863,829	1,863,829	--	--	1,863,829	1,863,829
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		281	7	205	493				
TOTAL FOOTAGE		2,689,941	89,120	1,685,980	4,465,041	9,573	12,731	8,224	9,057
TOTAL COSTS $		258,045,555	14,318,449	106,895,441	377,259,445	911,194	2,045,493	521,441	765,232

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 34

OKLAHOMA

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		595	170	225	990				
FOOTAGE	0 - 1,249	516,666	152,157	173,029	846,852	868	895	791	855
COSTS $		17,519,824	6,902,118	4,174,551	28,596,493	29,445	40,601	18,554	28,885
WELLS		1,050	275	393	1,718				
FOOTAGE	1,250 - 2,499	1,933,134	508,821	745,228	3,187,183	1,841	1,850	1,896	1,855
COSTS $		77,403,219	21,947,103	18,987,371	118,337,693	73,717	79,808	48,314	68,881
WELLS		814	170	412	1,396				
FOOTAGE	2,500 - 3,749	2,465,245	531,305	1,274,999	4,271,549	3,029	3,125	3,095	3,060
COSTS $		107,224,052	23,510,832	35,442,866	166,177,750	131,725	138,299	86,026	119,039
WELLS		518	96	368	982				
FOOTAGE	3,750 - 4,999	2,281,726	416,540	1,619,446	4,317,712	4,405	4,339	4,401	4,397
COSTS $		108,977,402	19,939,892	48,941,098	177,858,392	210,381	207,707	132,992	181,119
WELLS		577	191	495	1,263				
FOOTAGE	5,000 - 7,499	3,471,206	1,212,469	2,989,728	7,673,403	6,016	6,348	6,040	6,076
COSTS $		185,596,585	64,843,564	106,641,689	357,081,838	321,658	339,495	215,438	282,725
WELLS		627	260	234	1,121				
FOOTAGE	7,500 - 9,999	5,417,320	2,274,920	1,998,115	9,690,355	8,640	8,750	8,539	8,644
COSTS $		369,237,789	147,360,848	90,736,419	607,335,056	588,896	566,773	387,762	541,780
WELLS		146	118	71	335				
FOOTAGE	10,000 - 12,499	1,569,353	1,313,495	778,232	3,666,080	10,749	11,174	10,961	10,944
COSTS $		144,127,279	131,321,244	60,985,839	336,934,362	987,173	1,117,129	858,956	1,005,774
WELLS		29	131	54	214				
FOOTAGE	12,500 - 14,999	386,824	1,762,127	734,009	2,882,960	13,339	13,451	13,593	13,472
COSTS $		58,763,613	280,343,694	122,661,521	461,768,828	2,026,332	2,140,028	2,271,510	2,157,798
WELLS		10	83	43	141				
FOOTAGE	15,000 - 17,499	164,442	1,429,476	694,344	2,288,262	16,444	16,244	16,159	16,232
COSTS $		35,293,536	358,783,638	206,031,466	600,108,640	3,529,354	4,077,087	4,791,430	4,256,090
WELLS		4	44	18	70				
FOOTAGE	17,500 - 19,999	74,480	880,851	335,032	1,290,363	18,620	18,351	18,613	18,434
COSTS $		24,088,659	319,460,350	137,900,619	481,449,628	6,022,165	6,655,424	7,661,146	6,877,852
WELLS		--	15	11	26				
FOOTAGE	20,000 & OVER	--	326,733	246,384	573,117	--	21,782	22,399	22,043
COSTS $		--	231,332,431	130,005,317	361,337,748	--	15,422,162	11,818,665	13,897,605
TOTAL WELLS		4,370	1,562	2,324	8,256				
TOTAL FOOTAGE		16,240,396	10,613,394	11,594,046	40,688,336	4,183	6,923	4,989	4,923
TOTAL COSTS $		1,128,231,958	1,606,245,714	962,509,756	3,696,986,428	258,177	1,028,326	414,160	447,794

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1963

TEXAS - TOTAL

Table 35

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		1,785	77	1,082	2,944				
FOOTAGE	0 - 1,249	1,357,267	67,102	818,406	2,242,775	760	871	756	762
COSTS $		47,843,746	2,396,216	17,314,630	67,556,592	26,803	31,146	16,002	22,947
WELLS		2,264	183	1,127	3,574				
FOOTAGE	1,250 - 2,499	3,918,531	343,703	1,986,374	6,248,608	1,731	1,878	1,763	1,748
COSTS $		174,599,624	14,342,737	46,805,697	235,748,058	77,120	78,376	41,531	65,962
WELLS		2,242	290	762	3,294				
FOOTAGE	2,500 - 3,749	7,117,914	919,161	2,390,901	10,427,976	3,175	3,170	3,138	3,166
COSTS $		335,185,909	42,307,191	62,103,643	439,596,743	149,503	145,887	81,501	133,454
WELLS		2,085	382	966	3,433				
FOOTAGE	3,750 - 4,999	9,314,731	1,680,890	4,289,260	15,284,881	4,467	4,400	4,440	4,452
COSTS $		406,965,129	70,165,708	114,414,496	591,545,333	195,187	183,680	118,442	172,311
WELLS		2,306	760	1,447	4,513				
FOOTAGE	5,000 - 7,499	14,207,289	4,782,190	8,865,448	27,854,927	6,161	6,292	6,127	6,172
COSTS $		742,958,166	267,042,672	319,990,039	1,329,990,877	322,185	351,372	221,140	294,702
WELLS		1,688	657	873	3,218				
FOOTAGE	7,500 - 9,999	14,585,734	5,740,341	7,487,985	27,814,060	8,641	8,737	8,577	8,643
COSTS $		961,416,345	487,169,330	451,174,512	1,399,760,690	569,559	741,507	516,809	590,355
WELLS		342	575	328	1,245				
FOOTAGE	10,000 - 12,499	3,729,782	6,341,784	3,628,879	13,700,445	10,906	11,029	11,064	11,004
COSTS $		327,386,804	908,836,934	393,033,232	1,629,256,970	957,271	1,580,586	1,198,272	1,303,640
WELLS		35	143	122	300				
FOOTAGE	12,500 - 14,999	461,422	1,905,323	1,620,495	3,987,240	13,183	13,324	13,283	13,291
COSTS $		77,493,084	410,323,099	326,680,224	814,496,407	2,214,088	2,869,392	2,677,707	2,714,988
WELLS		5	46	29	80				
FOOTAGE	15,000 - 17,499	79,061	732,897	463,443	1,275,401	15,812	15,933	15,981	15,943
COSTS $		21,908,106	258,029,610	154,890,307	434,828,023	4,381,621	5,609,340	5,341,045	5,435,351
WELLS		2	12	16	30				
FOOTAGE	17,500 - 19,999	37,283	219,761	291,597	548,641	18,642	18,313	18,225	18,288
COSTS $		9,311,561	99,373,346	108,980,988	217,665,895	4,655,781	8,281,112	6,811,312	7,255,530
WELLS		1	7	9	17				
FOOTAGE	20,000 & OVER	26,805	148,858	205,704	381,367	26,805	21,265	22,856	22,433
COSTS $		14,020,423	83,076,670	102,983,219	200,080,312	14,020,423	11,868,096	11,442,580	11,769,430
TOTAL WELLS		12,755	3,132	6,761	22,648				
TOTAL FOOTAGE		54,835,819	22,882,010	32,048,492	109,766,321	4,299	7,306	4,740	4,847
TOTAL COSTS $		3,119,088,900	2,643,066,013	2,098,370,987	7,860,525,900	244,539	843,891	310,364	347,074

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 1

Table 36

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		474	9	72	555				
FOOTAGE	0 - 1,249	303,288	6,870	52,510	362,668	640	763	729	653
COSTS $		9,632,589	468,507	2,525,760	12,626,856	20,322	52,056	35,080	22,751
WELLS		867	7	151	1,025				
FOOTAGE	1,250 - 2,499	1,449,700	14,042	271,105	1,734,847	1,672	2,006	1,795	1,693
COSTS $		40,685,930	780,653	7,199,304	48,665,887	46,927	111,522	47,678	47,479
WELLS		206	21	87	314				
FOOTAGE	2,500 - 3,749	589,894	62,569	269,546	922,009	2,864	2,979	3,098	2,936
COSTS $		19,613,770	3,011,768	8,699,254	31,324,812	95,212	143,418	99,991	99,761
WELLS		43	3	40	86				
FOOTAGE	3,750 - 4,999	192,162	13,487	172,844	378,493	4,469	4,496	4,321	4,401
COSTS $		7,246,149	767,063	5,099,984	13,113,196	168,515	255,688	127,500	152,479
WELLS		112	12	80	204				
FOOTAGE	5,000 - 7,499	702,823	75,205	491,810	1,269,838	6,275	6,267	6,148	6,225
COSTS $		31,021,907	3,743,747	18,262,811	53,028,465	276,981	311,979	228,285	259,943
WELLS		78	22	32	132				
FOOTAGE	7,500 - 9,999	683,911	194,971	261,839	1,140,721	8,768	8,862	8,182	8,642
COSTS $		40,850,909	14,591,973	12,614,332	68,057,214	523,730	663,272	394,198	515,585
WELLS		16	9	10	35				
FOOTAGE	10,000 - 12,499	163,895	100,445	108,468	372,808	10,243	11,161	10,847	10,652
COSTS $		10,750,306	11,234,156	8,432,842	30,417,304	671,894	1,248,240	843,284	869,066
WELLS		--	1	2	3				
FOOTAGE	12,500 - 14,999	--	14,210	27,409	41,619	--	14,210	13,705	13,873
COSTS $		--	1,804,187	4,221,349	6,025,536	--	1,804,187	2,110,675	2,008,512
WELLS		1	1	--	2				
FOOTAGE	15,000 - 17,499	16,600	15,464	--	32,064	16,600	15,464	--	16,032
COSTS $		1,033,199	10,461,305	--	11,494,504	1,033,199	10,461,305	--	5,747,252
WELLS		--	1	2	3				
FOOTAGE	17,500 - 19,999	--	17,570	35,453	53,023	--	17,570	17,727	17,674
COSTS $		--	16,253,361	15,475,721	31,729,082	--	16,253,361	7,737,861	10,576,361
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,797	86	476	2,359				
TOTAL FOOTAGE		4,102,273	514,833	1,690,964	6,308,090	2,283	5,986	3,552	2,674
TOTAL COSTS $		160,834,759	63,116,740	82,531,357	306,482,856	89,502	733,916	173,385	129,921

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 2

Table 37

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		1	3	10	14				
FOOTAGE	0 - 1,249	1,040	2,683	9,928	13,651	1,040	894	993	975
COSTS $		83,200	181,515	490,539	755,254	83,200	60,505	49,054	53,947
WELLS		2	7	7	16				
FOOTAGE	1,250 - 2,499	3,422	12,706	12,334	28,462	1,711	1,815	1,762	1,779
COSTS $		1,476,322	566,038	356,360	2,398,720	738,161	80,863	50,909	149,920
WELLS		15	32	29	76				
FOOTAGE	2,500 - 3,749	49,615	103,947	89,574	243,136	3,308	3,248	3,089	3,199
COSTS $		2,129,606	4,160,640	2,051,934	8,342,180	141,974	130,020	70,756	109,766
WELLS		38	45	51	134				
FOOTAGE	3,750 - 4,999	166,550	206,010	227,528	600,088	4,383	4,578	4,461	4,478
COSTS $		6,826,516	7,578,924	4,340,663	18,746,103	179,645	168,421	85,111	139,896
WELLS		64	74	81	219				
FOOTAGE	5,000 - 7,499	393,379	441,887	498,566	1,333,832	6,147	5,971	6,155	6,091
COSTS $		24,580,142	19,564,956	12,314,960	56,460,058	384,065	264,391	152,037	257,808
WELLS		16	48	49	113				
FOOTAGE	7,500 - 9,999	135,271	434,824	436,405	1,006,500	8,454	9,059	8,906	8,907
COSTS $		10,929,677	26,063,871	25,357,652	62,351,200	683,105	542,997	517,503	551,781
WELLS		1	42	23	66				
FOOTAGE	10,000 - 12,499	10,800	465,079	247,865	723,744	10,800	11,073	10,777	10,966
COSTS $		1,512,000	54,187,989	21,821,618	77,521,607	1,512,000	1,290,190	948,766	1,174,570
WELLS		1	21	9	31				
FOOTAGE	12,500 - 14,999	13,537	286,665	119,943	419,145	13,537	13,651	13,216	13,521
COSTS $		4,303,753	59,905,141	23,731,534	87,940,428	4,303,753	2,852,626	2,636,837	2,836,788
WELLS		--	4	2	6				
FOOTAGE	15,000 - 17,499	--	61,512	30,824	92,336	--	15,378	15,412	15,389
COSTS $		--	16,241,803	8,151,602	24,393,405	--	4,060,451	4,075,801	4,065,568
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		138	276	261	675				
TOTAL FOOTAGE		773,614	2,015,313	1,671,967	4,460,894	5,606	7,302	6,406	6,609
TOTAL COSTS $		51,841,216	188,450,877	98,616,862	338,908,955	375,661	682,793	377,842	502,087

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 38

TEXAS RRC DIST. 3

DEPTH INTERVAL (FEET)		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
WELLS	0 - 1,249	40	5	35	80				
FOOTAGE		40,507	3,712	18,749	62,968	1,013	742	536	787
COSTS $		2,339,758	207,094	781,789	3,328,641	58,494	41,419	22,337	41,603
WELLS	1,250 - 2,499	42	2	23	67				
FOOTAGE		77,746	4,343	38,830	120,919	1,851	2,172	1,688	1,805
COSTS $		4,806,585	326,306	1,118,055	6,250,946	114,443	163,153	48,611	93,298
WELLS	2,500 - 3,749	63	18	23	104				
FOOTAGE		211,224	53,961	74,390	339,575	3,353	2,998	3,234	3,265
COSTS $		13,723,364	3,159,691	2,270,883	19,152,938	217,831	175,483	98,734	184,163
WELLS	3,750 - 4,999	106	17	55	178				
FOOTAGE		453,842	70,423	243,151	773,416	4,282	4,495	4,421	4,345
COSTS $		27,240,186	4,045,420	7,589,231	38,874,837	256,983	237,966	137,986	218,393
WELLS	5,000 - 7,499	144	61	126	331				
FOOTAGE		882,263	399,310	795,104	2,076,677	6,127	6,546	6,310	6,274
COSTS $		60,136,653	26,038,981	33,130,268	119,305,902	417,616	426,869	262,939	360,441
WELLS	7,500 - 9,999	492	79	161	732				
FOOTAGE		4,305,705	707,011	1,412,825	6,425,541	8,751	8,950	8,775	8,778
COSTS $		315,379,659	58,564,279	76,214,765	450,158,703	641,016	741,320	473,384	614,971
WELLS	10,000 - 12,499	89	92	87	268				
FOOTAGE		961,540	1,022,449	957,258	2,941,247	10,804	11,114	11,003	10,975
COSTS $		87,226,516	121,637,914	79,677,441	288,541,871	980,073	1,322,151	915,833	1,076,649
WELLS	12,500 - 14,999	5	31	25	61				
FOOTAGE		65,335	407,628	336,674	809,637	13,067	13,149	13,467	13,273
COSTS $		12,077,475	65,503,741	50,950,602	128,531,868	2,415,495	2,113,026	2,038,024	2,107,080
WELLS	15,000 - 17,499	--	6	8	14				
FOOTAGE		--	96,619	129,703	226,322	--	16,103	16,213	16,166
COSTS $		--	27,294,923	26,069,847	53,364,770	--	4,549,154	3,258,731	3,811,769
WELLS	17,500 - 19,999	--	1	1	2				
FOOTAGE		--	17,506	18,000	35,506	--	17,506	18,000	17,753
COSTS $		--	5,843,627	3,335,649	9,179,276	--	5,843,627	3,335,649	4,589,638
WELLS	20,000 & OVER	--	--	1	1				
FOOTAGE		--	--	20,182	20,182	--	--	20,182	20,182
COSTS $		--	--	3,429,693	3,429,693	--	--	3,429,693	3,429,693
TOTAL WELLS		981	312	545	1,838				
TOTAL FOOTAGE		6,998,162	2,788,962	4,044,866	13,831,990	7,134	8,939	7,422	7,526
TOTAL COSTS $		522,930,196	312,621,026	284,568,223	1,120,119,445	533,058	1,001,990	522,144	609,423

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 39

TEXAS RRC DIST. 4

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		1	3	6	10				
FOOTAGE	0 - 1,249	800	2,755	5,875	9,430	800	918	979	943
COSTS $		37,760	150,445	273,656	466,861	37,760	50,148	46,443	46,686
WELLS		14	10	27	51				
FOOTAGE	1,250 - 2,499	30,116	19,033	52,880	102,029	2,151	1,903	1,959	2,001
COSTS $		1,372,229	965,527	1,908,763	4,246,519	98,016	96,553	70,695	83,265
WELLS		19	17	29	65				
FOOTAGE	2,500 - 3,749	58,573	53,550	89,751	201,874	3,083	3,150	3,095	3,106
COSTS $		3,625,148	2,477,215	2,729,627	8,831,990	190,797	145,719	94,125	135,877
WELLS		15	21	58	94				
FOOTAGE	3,750 - 4,999	64,170	91,554	250,192	405,916	4,278	4,360	4,314	4,318
COSTS $		3,224,238	4,143,559	7,451,251	14,819,048	214,949	197,312	128,470	157,649
WELLS		96	111	172	379				
FOOTAGE	5,000 - 7,499	586,182	699,799	1,056,393	2,342,374	6,106	6,304	6,142	6,180
COSTS $		29,178,383	37,400,752	36,543,964	103,123,099	303,942	336,944	212,465	272,093
WELLS		36	193	113	342				
FOOTAGE	7,500 - 9,999	297,405	1,698,879	969,675	2,965,959	8,261	8,802	8,581	8,672
COSTS $		19,076,281	149,702,452	56,509,939	225,288,672	529,897	775,660	500,088	658,739
WELLS		3	159	50	212				
FOOTAGE	10,000 - 12,499	32,049	1,731,662	545,409	2,309,120	10,683	10,891	10,908	10,892
COSTS $		2,934,658	235,893,470	50,986,781	289,814,909	978,219	1,483,607	1,019,736	1,367,052
WELLS		1	32	21	54				
FOOTAGE	12,500 - 14,999	13,170	423,296	278,001	714,467	13,170	13,228	13,238	13,231
COSTS $		2,069,797	105,508,764	40,291,761	147,870,322	2,069,797	3,297,149	1,918,655	2,738,339
WELLS		--	16	7	23				
FOOTAGE	15,000 - 17,499	--	255,452	111,029	366,481	--	15,966	15,861	15,934
COSTS $		--	106,886,604	23,905,899	130,792,503	--	6,680,413	3,415,129	5,686,631
WELLS		--	2	5	7				
FOOTAGE	17,500 - 19,999	--	36,125	91,128	127,253	--	18,063	18,226	18,179
COSTS $		--	19,858,211	30,842,798	50,701,009	--	9,929,106	6,168,560	7,243,002
WELLS		--	1	--	1				
FOOTAGE	20,000 & OVER	--	20,103	--	20,103	--	20,103	--	20,103
COSTS $		--	15,319,393	--	15,319,893	--	15,319,893	--	15,319,893
TOTAL WELLS		185	565	488	1,233				
TOTAL FOOTAGE		1,082,465	5,032,208	3,450,333	9,565,006	5,851	8,907	7,070	7,726
TOTAL COSTS $		61,518,494	678,306,892	251,449,439	991,274,825	332,532	1,200,543	515,265	800,707

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 40

TEXAS RRC DIST. 5

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		191	--	55	246				
FOOTAGE	0 - 1,249	170,384	--	50,724	221,108	892	--	922	899
COSTS $		3,095,152	--	388,570	3,483,722	16,205	--	7,065	14,161
WELLS		49	1	16	66				
FOOTAGE	1,250 - 2,499	72,834	1,740	25,994	100,568	1,486	1,740	1,625	1,524
COSTS $		1,730,077	32,269	288,456	2,050,802	35,308	32,269	18,029	31,073
WELLS		14	1	19	34				
FOOTAGE	2,500 - 3,749	45,436	3,308	58,540	107,284	3,245	3,308	3,081	3,155
COSTS $		1,917,121	90,606	1,076,993	3,084,720	136,937	90,606	56,684	90,727
WELLS		2	1	10	13				
FOOTAGE	3,750 - 4,999	8,970	4,051	41,968	54,989	4,485	4,051	4,197	4,230
COSTS $		407,338	129,632	975,232	1,512,202	203,669	129,632	97,523	116,323
WELLS		5	2	27	34				
FOOTAGE	5,000 - 7,499	32,889	13,163	167,530	213,582	6,578	6,582	6,205	6,282
COSTS $		1,664,862	947,082	5,826,937	8,438,931	332,972	473,541	215,814	248,204
WELLS		26	24	28	78				
FOOTAGE	7,500 - 9,999	208,706	203,923	231,856	644,485	8,027	8,497	8,281	8,263
COSTS $		16,411,199	17,409,063	13,205,337	47,025,599	631,200	725,378	471,619	602,892
WELLS		2	42	11	55				
FOOTAGE	10,000 - 12,499	23,018	482,711	119,674	625,403	11,509	11,493	10,879	11,371
COSTS $		2,118,196	60,313,869	11,770,468	74,207,533	1,059,098	1,436,164	1,070,043	1,349,228
WELLS		--	23	5	28				
FOOTAGE	12,500 - 14,999	--	298,332	65,312	363,644	--	12,971	13,062	12,987
COSTS $		--	51,886,195	10,501,181	62,387,376	--	2,255,922	2,100,236	2,228,121
WELLS		--	4	1	5				
FOOTAGE	15,000 - 17,499	--	63,131	15,867	78,998	--	15,783	15,867	15,800
COSTS $		--	22,321,273	4,384,395	26,705,668	--	5,580,319	4,384,395	5,341,134
WELLS		--	--	3	3				
FOOTAGE	17,500 - 19,999	--	--	55,000	55,000	--	--	18,333	18,333
COSTS $		--	--	26,409,788	26,409,788	--	--	8,803,263	8,803,263
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		289	98	175	562				
TOTAL FOOTAGE		562,237	1,070,359	832,465	2,465,061	1,945	10,922	4,757	4,386
TOTAL COSTS $		27,343,945	153,134,989	74,827,407	255,306,341	94,616	1,562,602	427,585	454,292

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 6

Table 41

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		113	--	27	140				
FOOTAGE	0 - 1,249	52,933	--	12,558	65,491	468	--	465	468
COSTS $		5,344,501	--	709,271	6,052,772	47,296	--	26,232	43,234
WELLS		10	1	16	27				
FOOTAGE	1,250 - 2,499	19,673	2,168	32,099	53,940	1,967	2,168	2,006	1,998
COSTS $		1,169,950	286,176	1,040,308	2,496,434	116,995	286,176	65,019	92,461
WELLS		10	3	20	33				
FOOTAGE	2,500 - 3,749	35,944	9,571	59,165	104,680	3,594	3,190	2,958	3,172
COSTS $		1,852,442	803,040	1,838,271	4,493,753	185,244	267,680	91,914	136,174
WELLS		75	2	21	98				
FOOTAGE	3,750 - 4,999	335,787	8,123	97,799	441,709	4,477	4,062	4,657	4,507
COSTS $		18,003,896	624,640	3,274,551	21,903,087	240,052	312,320	155,931	223,501
WELLS		65	45	71	181				
FOOTAGE	5,000 - 7,499	414,888	302,941	447,889	1,165,718	6,383	6,732	6,308	6,440
COSTS $		25,524,322	21,778,121	16,151,827	63,454,270	392,682	483,958	227,491	350,576
WELLS		144	121	99	364				
FOOTAGE	7,500 - 9,999	1,168,947	1,050,843	837,240	3,077,030	8,257	8,685	8,457	8,453
COSTS $		83,486,047	99,629,130	41,731,804	224,846,981	579,764	823,381	421,533	617,712
WELLS		43	147	28	218				
FOOTAGE	10,000 - 12,499	463,344	1,607,562	315,749	2,386,655	10,775	10,936	11,277	10,948
COSTS $		39,923,650	199,406,652	29,023,491	268,353,793	928,457	1,356,508	1,036,553	1,230,981
WELLS		--	4	6	10				
FOOTAGE	12,500 - 14,999	--	52,326	80,107	132,433	--	13,082	13,351	13,243
COSTS $		--	8,599,623	14,080,156	22,679,779	--	2,149,906	2,346,693	2,267,978
WELLS		--	1	2	3				
FOOTAGE	15,000 - 17,499	--	16,510	32,857	49,367	--	16,510	16,429	16,456
COSTS $		--	3,896,360	11,820,652	15,717,012	--	3,896,360	5,910,326	5,239,004
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	18,300	18,300	--	--	18,300	18,300
COSTS $		--	--	6,925,510	6,925,510	--	--	6,925,510	6,925,510
WELLS		--	2	--	2				
FOOTAGE	20,000 & OVER	--	42,080	--	42,080	--	21,040	--	21,040
COSTS $		--	13,846,284	--	13,846,284	--	6,923,142	--	6,923,142
TOTAL WELLS		460	326	291	1,077				
TOTAL FOOTAGE		2,511,516	3,092,124	1,933,763	7,537,403	5,460	9,485	6,645	6,999
TOTAL COSTS $		175,304,808	349,670,026	126,596,841	650,769,675	381,097	1,070,154	435,034	604,243

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 7B

Table 42

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		448	38	333	819				
FOOTAGE	0 - 1,249	351,649	34,630	220,359	606,638	785	911	662	741
COSTS $		12,411,445	863,807	4,540,789	17,816,041	27,704	22,732	13,636	21,753
WELLS		380	116	397	893				
FOOTAGE	1,250 - 2,499	667,257	213,029	703,905	1,584,191	1,756	1,836	1,773	1,774
COSTS $		21,474,484	7,191,374	12,682,393	41,348,251	56,512	61,995	31,946	46,303
WELLS		377	106	282	765				
FOOTAGE	2,500 - 3,749	1,198,634	336,930	896,557	2,432,121	3,179	3,179	3,179	3,179
COSTS $		44,518,081	11,994,709	19,759,576	76,272,366	118,085	113,158	70,069	99,702
WELLS		555	205	345	1,105				
FOOTAGE	3,750 - 4,999	2,408,706	879,211	1,529,485	4,817,402	4,340	4,289	4,433	4,360
COSTS $		96,171,648	33,140,000	40,372,203	169,683,851	173,282	161,659	117,021	153,560
WELLS		231	82	246	559				
FOOTAGE	5,000 - 7,499	1,345,951	462,570	1,461,293	3,269,814	5,827	5,641	5,940	5,849
COSTS $		63,339,396	22,385,196	40,827,602	126,552,194	274,197	272,990	165,966	226,390
WELLS		--	1	--	1				
FOOTAGE	7,500 - 9,999	--	7,592	--	7,592	--	7,592	--	7,592
COSTS $		--	584,584	--	584,584	--	584,584	--	584,584
WELLS		--	--	--	--				
FOOTAGE	10,000 - 12,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,991	548	1,603	4,142				
TOTAL FOOTAGE		5,972,197	1,933,962	4,811,599	12,717,758	3,000	3,529	3,002	3,070
TOTAL COSTS $		237,915,054	76,159,670	113,182,563	432,257,287	119,495	138,978	73,726	104,360

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 7C

Table 43

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		21	11	38	70				
FOOTAGE	0 - 1,249	22,270	10,409	32,140	64,819	1,060	946	846	926
COSTS $		1,207,448	359,388	1,250,767	2,817,603	57,498	32,672	32,915	40,251
WELLS		120	11	35	166				
FOOTAGE	1,250 - 2,499	264,312	20,189	63,867	348,368	2,203	1,835	1,825	2,099
COSTS $		15,006,994	966,674	2,125,926	18,099,594	125,058	87,879	60,741	109,034
WELLS		183	19	45	247				
FOOTAGE	2,500 - 3,749	523,378	62,515	136,795	722,688	2,860	3,290	3,040	2,926
COSTS $		28,247,015	2,703,521	3,605,344	34,555,880	154,355	142,291	80,119	139,902
WELLS		141	24	118	283				
FOOTAGE	3,750 - 4,999	621,770	106,128	523,945	1,251,843	4,410	4,422	4,440	4,423
COSTS $		28,090,229	5,394,628	12,026,790	45,511,647	199,221	224,776	101,922	160,819
WELLS		317	197	149	663				
FOOTAGE	5,000 - 7,499	2,105,521	1,281,576	916,988	4,304,085	6,642	6,505	6,154	6,492
COSTS $		102,199,431	61,459,456	23,159,792	186,818,679	322,396	311,977	155,435	281,778
WELLS		134	88	31	253				
FOOTAGE	7,500 - 9,999	1,122,345	740,750	261,593	2,124,688	8,376	8,418	8,438	8,398
COSTS $		63,163,160	35,117,876	8,987,218	107,268,254	471,367	399,067	289,910	423,985
WELLS		33	8	7	48				
FOOTAGE	10,000 - 12,499	361,327	91,296	76,599	529,222	10,949	11,412	10,943	11,025
COSTS $		32,551,484	7,027,130	3,616,487	43,195,101	986,409	878,391	516,641	899,898
WELLS		1	2	1	4				
FOOTAGE	12,500 - 14,999	13,682	26,766	13,100	53,548	13,682	13,383	13,100	13,387
COSTS $		1,661,621	3,567,729	823,191	6,052,541	1,661,621	1,783,865	823,191	1,513,135
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	1	--	1				
FOOTAGE	17,500 - 19,999	--	19,041	--	19,041	--	19,041	--	19,041
COSTS $		--	9,266,116	--	9,266,116	--	9,266,116	--	9,266,116
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		950	361	424	1,735				
TOTAL FOOTAGE		5,034,605	2,358,670	2,025,027	9,418,302	5,300	6,534	4,776	5,428
TOTAL COSTS $		272,127,382	125,362,518	55,595,515	453,585,415	286,450	348,650	131,122	261,433

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 8

Table 44

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		25	--	8	33				
FOOTAGE	0 - 1,249	27,825	--	5,643	33,468	1,113	--	705	1,014
COSTS $		4,550,173	--	708,955	5,259,128	182,007	--	88,619	159,368
WELLS		244	4	21	269				
FOOTAGE	1,250 - 2,499	407,967	6,344	40,143	454,454	1,672	1,586	1,912	1,689
COSTS $		60,189,961	386,994	2,111,729	62,688,674	246,680	96,746	100,559	233,043
WELLS		637	28	40	705				
FOOTAGE	2,500 - 3,749	2,047,253	87,536	128,457	2,263,246	3,214	3,126	3,211	3,210
COSTS $		102,959,151	3,975,706	6,696,433	113,631,290	161,631	141,990	167,411	161,179
WELLS		396	8	45	449				
FOOTAGE	3,750 - 4,999	1,777,863	33,729	195,598	2,007,190	4,490	4,216	4,347	4,470
COSTS $		87,963,919	1,825,683	9,367,270	99,156,872	222,131	228,210	208,162	220,839
WELLS		266	21	59	346				
FOOTAGE	5,000 - 7,499	1,711,991	124,011	365,575	2,201,577	6,436	5,905	6,196	6,363
COSTS $		90,298,533	8,055,551	20,955,015	119,309,099	339,468	383,598	355,170	344,824
WELLS		448	4	71	523				
FOOTAGE	7,500 - 9,999	3,987,609	35,353	604,380	4,627,342	8,901	8,838	8,512	8,848
COSTS $		229,631,274	2,646,674	32,147,479	264,425,427	512,570	661,669	452,781	505,594
WELLS		103	8	30	141				
FOOTAGE	10,000 - 12,499	1,128,617	91,916	333,495	1,554,028	10,957	11,490	11,117	11,021
COSTS $		91,040,979	9,725,621	23,766,848	124,533,448	883,893	1,215,703	792,228	883,216
WELLS		21	5	8	34				
FOOTAGE	12,500 - 14,999	273,442	71,115	107,163	451,720	13,021	14,223	13,395	13,286
COSTS $		24,125,140	10,587,192	10,505,693	45,218,025	1,148,816	2,117,439	1,313,212	1,329,942
WELLS		3	2	--	5				
FOOTAGE	15,000 - 17,499	46,986	32,188	--	79,174	15,662	16,094	--	15,835
COSTS $		9,183,831	8,145,480	--	17,329,311	3,061,277	4,072,740	--	3,465,862
WELLS		2	4	2	8				
FOOTAGE	17,500 - 19,999	37,283	72,780	37,110	147,173	18,642	18,195	18,555	18,397
COSTS $		9,311,561	21,616,187	10,889,682	41,817,430	4,655,781	5,404,047	5,444,841	5,227,179
WELLS		1	3	7	11				
FOOTAGE	20,000 & OVER	26,805	64,500	161,889	253,194	26,805	21,500	23,127	23,018
COSTS $		14,020,423	37,700,346	93,182,011	144,902,780	14,020,423	12,566,782	13,311,716	13,172,980
TOTAL WELLS		2,146	87	291	2,524				
TOTAL FOOTAGE		11,473,641	619,472	1,979,453	14,072,566	5,347	7,120	6,802	5,576
TOTAL COSTS $		723,274,945	104,665,424	210,331,115	1,038,271,484	337,034	1,203,051	722,787	411,360

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 45

TEXAS RRC DIST. 8A

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	4	4				
FOOTAGE	0 - 1,249	--	--	1,254	1,254	--	--	314	314
COSTS $		--	--	104,740	104,740	--	--	26,185	26,185
WELLS		33	--	3	36				
FOOTAGE	1,250 - 2,499	60,119	--	4,165	64,284	1,822	--	1,388	1,786
COSTS $		2,389,964	--	89,260	2,479,224	72,423	--	29,753	68,867
WELLS		150	1	29	180				
FOOTAGE	2,500 - 3,749	466,050	3,380	95,834	565,264	3,107	3,380	3,305	3,140
COSTS $		20,686,522	256,144	2,563,979	23,506,645	137,910	256,144	88,413	130,592
WELLS		345	4	48	397				
FOOTAGE	3,750 - 4,999	1,635,444	19,338	219,408	1,874,190	4,740	4,835	4,571	4,721
COSTS $		68,212,294	1,177,620	7,390,826	76,780,740	197,717	294,405	153,976	193,402
WELLS		576	5	91	672				
FOOTAGE	5,000 - 7,499	3,437,560	29,640	565,811	4,033,011	5,968	5,928	6,218	6,002
COSTS $		179,338,786	2,758,922	22,784,227	204,881,935	311,352	551,784	250,376	304,884
WELLS		153	1	121	275				
FOOTAGE	7,500 - 9,999	1,287,645	8,797	1,029,258	2,325,700	8,416	8,797	8,506	8,457
COSTS $		83,266,670	583,509	48,440,480	132,290,659	544,227	583,509	400,335	481,057
WELLS		29	--	44	73				
FOOTAGE	10,000 - 12,499	335,280	--	495,235	830,515	11,561	--	11,255	11,377
COSTS $		25,435,610	--	24,846,604	50,282,214	877,090	--	564,696	688,797
WELLS		3	--	18	21				
FOOTAGE	12,500 - 14,999	38,100	--	231,776	269,876	12,700	--	12,876	12,851
COSTS $		3,258,412	--	10,412,424	13,670,836	1,086,137	--	578,468	650,992
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,289	11	358	1,658				
TOTAL FOOTAGE		7,260,198	61,155	2,642,741	9,964,094	5,632	5,560	7,382	6,010
TOTAL COSTS $		382,588,258	4,776,195	116,632,540	503,996,993	296,810	434,200	325,789	303,979

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 9

Table 46

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		471	8	493	972				
FOOTAGE	0 - 1,249	386,571	6,043	408,214	800,828	821	755	828	824
COSTS $		9,141,720	167,460	5,493,450	14,802,630	19,409	20,933	11,143	15,229
WELLS		451	1	424	876				
FOOTAGE	1,250 - 2,499	749,692	1,539	726,520	1,477,751	1,662	1,539	1,713	1,687
COSTS $		17,820,693	47,596	12,966,513	30,834,802	39,514	47,596	30,581	35,200
WELLS		129	3	146	278				
FOOTAGE	2,500 - 3,749	409,341	9,767	449,040	868,148	3,173	3,256	3,076	3,123
COSTS $		12,956,049	323,953	8,093,594	21,373,596	100,434	107,984	55,436	76,883
WELLS		326	49	175	550				
FOOTAGE	3,750 - 4,999	1,478,998	230,101	787,342	2,496,441	4,537	4,696	4,499	4,539
COSTS $		54,529,768	8,562,368	16,526,495	79,618,631	167,269	174,742	94,437	144,761
WELLS		369	116	290	775				
FOOTAGE	5,000 - 7,499	2,180,192	717,027	1,728,026	4,625,245	5,908	6,181	5,959	5,968
COSTS $		101,004,087	35,093,741	43,219,541	179,317,369	273,724	302,532	149,033	231,377
WELLS		53	3	81	137				
FOOTAGE	7,500 - 9,999	443,155	24,650	687,635	1,155,440	8,361	8,217	8,489	8,434
COSTS $		27,780,294	1,867,971	24,028,414	53,676,679	524,157	622,657	296,647	391,801
WELLS		8	--	1	9				
FOOTAGE	10,000 - 12,499	84,620	--	11,500	96,120	10,578	--	11,500	10,680
COSTS $		9,525,306	--	1,056,760	10,582,066	1,190,663	--	1,056,760	1,175,785
WELLS		--	--	--	--				
FOOTAGE	12,500 - 14,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	1	1	2				
FOOTAGE	15,000 - 17,499	--	16,949	16,643	33,592	--	16,949	16,643	16,796
COSTS $		--	3,912,338	2,857,117	6,669,455	--	3,812,338	2,857,117	3,334,728
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,807	181	1,611	3,599				
TOTAL FOOTAGE		5,732,569	1,006,076	4,814,920	11,553,565	3,172	5,558	2,989	3,210
TOTAL COSTS $		232,757,917	49,875,427	114,241,884	396,875,228	128,809	275,555	70,914	110,274

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS RRC DIST. 10

Table 47

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
0 - 1,249	WELLS	--	--	1	1				
	FOOTAGE	--	--	452	452	--	--	452	452
	COSTS $	--	--	42,344	42,344	--	--	42,344	42,344
1,250 - 2,499	WELLS	52	23	6	81				
	FOOTAGE	115,693	48,570	13,170	177,433	2,225	2,112	2,195	2,191
	COSTS $	6,476,435	2,793,140	931,606	10,201,181	124,547	121,441	155,268	125,941
2,500 - 3,749	WELLS	439	40	12	491				
	FOOTAGE	1,462,572	129,070	40,176	1,651,818	3,377	3,227	3,348	3,364
	COSTS $	82,957,640	7,240,150	2,260,014	92,457,804	188,970	181,004	188,335	188,305
3,750 - 4,999	WELLS	43	2	--	45				
	FOOTAGE	170,469	8,389	--	179,358	3,964	4,445	--	3,986
	COSTS $	9,048,943	543,843	--	9,592,791	210,441	271,922	--	213,173
5,000 - 7,499	WELLS	54	27	37	118				
	FOOTAGE	367,994	139,952	248,062	806,008	6,815	7,035	6,704	6,831
	COSTS $	19,750,875	9,661,362	9,749,451	39,161,688	365,757	357,828	263,499	331,879
7,500 - 9,999	WELLS	101	58	53	212				
	FOOTAGE	866,616	496,388	457,228	1,820,232	8,580	8,558	8,627	8,586
	COSTS $	52,650,100	27,672,549	18,750,586	99,273,235	521,288	490,561	353,785	468,270
10,000 - 12,499	WELLS	13	32	8	53				
	FOOTAGE	143,911	351,602	89,561	585,074	11,070	10,988	11,195	11,039
	COSTS $	16,789,633	26,775,017	4,195,714	47,760,364	1,291,510	836,719	524,464	901,139
12,500 - 14,999	WELLS	--	11	7	18				
	FOOTAGE	--	149,694	93,355	243,049	--	13,609	13,336	13,503
	COSTS $	--	17,925,208	8,328,195	26,253,403	--	1,629,564	1,189,742	1,458,522
15,000 - 17,499	WELLS	--	5	--	5				
	FOOTAGE	--	128,402	--	128,402	--	16,050	--	16,050
	COSTS $	--	24,919,969	--	24,919,969	--	3,114,996	--	3,114,996
17,500 - 19,999	WELLS	--	3	2	5				
	FOOTAGE	--	56,739	36,606	93,345	--	18,913	18,303	18,669
	COSTS $	--	26,535,844	15,101,840	41,637,684	--	8,845,281	7,550,920	8,327,537
20,000 & OVER	WELLS	--	1	1	2				
	FOOTAGE	--	22,175	23,633	45,808	--	22,175	23,633	22,904
	COSTS $	--	16,210,147	6,371,515	22,581,662	--	16,210,147	6,371,515	11,290,831
TOTAL WELLS		702	205	127	1,034				
TOTAL FOOTAGE		3,147,255	1,561,481	1,002,243	5,730,979	4,483	7,715	7,892	5,543
TOTAL COSTS $		187,673,631	160,477,229	65,731,265	413,882,125	267,341	782,816	517,569	400,273

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

TEXAS - OFFSHORE

Table 48

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	1,250 - 2,499	--	--	1,362	1,362	--	--	1,362	1,362
COSTS $		--	--	3,987,024	3,987,024	--	--	3,987,024	3,987,024
WELLS		--	1	1	2				
FOOTAGE	2,500 - 3,749	--	3,057	3,076	6,133	--	3,057	3,076	3,067
COSTS $		--	2,111,028	457,741	2,568,769	--	2,111,028	457,741	1,284,385
WELLS		--	1	--	1				
FOOTAGE	3,750 - 4,999	--	3,846	--	3,846	--	3,846	--	3,846
COSTS $		--	2,232,328	--	2,232,328	--	2,232,328	--	2,232,328
WELLS		7	7	18	32				
FOOTAGE	5,000 - 7,499	45,656	45,109	122,401	213,166	6,522	6,444	6,800	6,661
COSTS $		14,920,789	18,154,805	37,063,594	70,139,188	2,131,541	2,593,544	2,059,089	2,191,850
WELLS		7	15	34	56				
FOOTAGE	7,500 - 9,999	58,419	136,360	298,051	492,830	8,346	9,091	8,766	8,801
COSTS $		13,791,078	52,535,599	93,186,506	164,513,483	2,684,440	3,502,393	2,740,780	2,937,741
WELLS		2	36	29	67				
FOOTAGE	10,000 - 12,499	21,381	397,062	328,066	746,509	10,691	11,030	11,313	11,142
COSTS $		7,578,466	182,630,116	133,838,178	324,046,760	3,789,233	5,073,059	4,615,110	4,836,519
WELLS		3	13	20	36				
FOOTAGE	12,500 - 14,999	44,156	175,291	268,655	488,102	14,719	13,484	13,433	13,558
COSTS $		29,996,386	85,035,269	152,834,138	267,866,293	9,998,962	6,541,175	7,641,707	7,440,731
WELLS		1	3	8	12				
FOOTAGE	15,000 - 17,499	15,475	46,670	126,520	188,665	15,475	15,557	15,815	15,722
COSTS $		11,691,076	34,049,555	77,700,795	123,441,426	11,691,076	11,349,852	9,712,599	10,286,786
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		20	76	111	207				
TOTAL FOOTAGE		185,087	807,395	1,148,131	2,140,613	9,254	10,624	10,344	10,341
TOTAL COSTS $		82,978,295	376,749,000	499,067,976	958,795,271	4,148,915	4,957,224	4,496,108	4,631,861

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

Table 49

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		7	3	12	22				
FOOTAGE	0 - 1,249	2,275	2,753	10,755	15,783	325	918	896	717
COSTS $		305,491	399,250	1,741,131	2,445,872	43,642	133,083	145,094	111,176
WELLS		12	13	23	48				
FOOTAGE	1,250 - 2,499	22,930	23,565	45,574	92,119	1,915	1,813	1,981	1,919
COSTS $		2,853,462	2,835,477	6,086,108	11,775,047	237,789	218,114	264,613	245,313
WELLS		4	9	17	30				
FOOTAGE	2,500 - 3,749	12,595	28,087	49,341	90,023	3,149	3,121	2,902	3,001
COSTS $		1,738,962	2,792,895	5,480,344	10,012,201	434,741	310,322	322,373	333,740
WELLS		11	7	11	29				
FOOTAGE	3,750 - 4,999	48,415	31,255	49,994	129,664	4,401	4,465	4,545	4,471
COSTS $		6,805,252	1,913,002	4,618,842	13,337,096	618,659	273,286	419,895	459,900
WELLS		90	45	51	186				
FOOTAGE	5,000 - 7,499	542,723	295,250	313,920	1,151,893	6,030	6,561	6,155	6,193
COSTS $		44,204,910	19,066,872	29,359,636	92,631,418	491,166	423,708	575,679	498,018
WELLS		2	13	8	23				
FOOTAGE	7,500 - 9,999	17,166	103,231	64,997	185,394	8,583	7,941	8,125	8,061
COSTS $		3,230,501	9,066,533	7,050,930	19,347,964	1,615,251	697,426	881,366	841,216
WELLS		3	1	5	9				
FOOTAGE	10,000 - 12,499	33,788	10,200	53,656	97,644	11,263	10,200	10,731	10,849
COSTS $		6,542,150	1,955,209	30,523,482	39,020,841	2,180,717	1,955,209	6,104,697	4,335,649
WELLS		15	13	6	34				
FOOTAGE	12,500 - 14,999	204,821	182,150	80,369	467,340	13,655	14,012	13,395	13,745
COSTS $		91,201,877	92,275,861	36,539,435	220,017,173	6,080,125	7,098,143	6,089,906	6,471,094
WELLS		4	--	3	7				
FOOTAGE	15,000 - 17,499	65,146	--	49,556	114,702	16,287	--	16,519	16,386
COSTS $		33,705,374	--	34,837,524	68,542,898	8,426,344	--	11,612,508	9,791,843
WELLS		1	1	--	2				
FOOTAGE	17,500 - 19,999	17,953	18,810	--	36,763	17,953	18,810	--	18,382
COSTS $		11,080,232	15,766,948	--	26,847,180	11,080,232	15,766,948	--	13,423,590
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		149	105	136	390				
TOTAL FOOTAGE		967,862	695,301	718,162	2,381,325	6,496	6,622	5,281	6,106
TOTAL COSTS $		201,668,211	146,072,047	156,237,432	503,977,690	1,353,478	1,391,162	1,148,805	1,292,251

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

WYOMING

Table 50

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		81	2	28	111				
FOOTAGE	0 - 1,249	57,344	1,412	19,461	78,217	708	706	695	705
COSTS $		4,173,622	294,229	1,729,304	6,197,155	51,526	147,115	61,761	55,830
WELLS		103	3	43	149				
FOOTAGE	1,250 - 2,499	188,430	4,876	79,254	272,560	1,829	1,625	1,843	1,829
COSTS $		11,131,361	557,080	6,116,920	17,805,361	108,071	185,693	142,254	119,499
WELLS		41	7	45	93				
FOOTAGE	2,500 - 3,749	134,705	22,769	143,822	301,296	3,285	3,253	3,196	3,240
COSTS $		11,377,720	2,524,662	8,796,084	22,698,466	277,505	360,666	195,469	244,070
WELLS		84	2	45	131				
FOOTAGE	3,750 - 4,999	377,660	8,109	194,566	580,335	4,496	4,055	4,324	4,430
COSTS $		28,582,667	811,363	12,743,986	42,138,016	340,270	405,682	283,200	321,664
WELLS		168	7	118	293				
FOOTAGE	5,000 - 7,499	1,022,032	46,453	766,355	1,834,840	6,084	6,636	6,495	6,262
COSTS $		62,154,602	5,542,280	35,724,161	103,421,043	369,968	791,754	302,747	352,973
WELLS		114	61	157	332				
FOOTAGE	7,500 - 9,999	992,243	568,206	1,347,017	2,907,466	8,704	9,315	8,580	8,757
COSTS $		63,297,188	49,871,454	57,546,642	170,715,284	555,239	817,565	366,539	514,203
WELLS		76	45	99	220				
FOOTAGE	10,000 - 12,499	805,957	493,843	1,077,150	2,376,950	10,605	10,974	10,880	10,804
COSTS $		61,326,552	60,132,796	54,828,369	176,287,717	806,928	1,336,284	553,822	801,308
WELLS		21	17	18	56				
FOOTAGE	12,500 - 14,999	273,920	229,941	239,289	743,150	13,044	13,526	13,294	13,271
COSTS $		57,299,301	74,077,024	47,101,223	178,477,548	2,728,538	4,357,472	2,616,735	3,187,099
WELLS		5	10	9	24				
FOOTAGE	15,000 - 17,499	81,649	160,923	146,073	388,645	16,330	16,092	16,230	16,194
COSTS $		36,908,731	110,243,019	51,625,105	198,776,855	7,381,746	11,024,302	5,736,123	8,282,369
WELLS		--	3	--	3				
FOOTAGE	17,500 - 19,999	--	55,576	--	55,576	--	18,525	--	18,525
COSTS $		--	31,346,160	--	31,346,160	--	10,448,720	--	10,448,720
WELLS		--	--	5	5				
FOOTAGE	20,000 & OVER	--	--	109,153	109,153	--	--	21,831	21,831
COSTS $		--	--	89,825,242	89,825,242	--	--	17,965,049	17,965,049
TOTAL WELLS		693	157	567	1,417				
TOTAL FOOTAGE		3,933,940	1,592,108	4,122,140	9,648,188	5,677	10,141	7,270	6,809
TOTAL COSTS $		336,251,744	335,400,067	366,037,036	1,037,688,847	485,212	2,136,306	645,568	732,314

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

APPALACHIAN*

Table 51

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		499	212	43	754				
FOOTAGE	0 - 1,249	423,598	199,471	31,039	654,108	849	941	722	868
COSTS $		13,703,382	9,825,058	659,718	24,188,158	27,462	46,345	15,342	32,080
WELLS		323	468	47	838				
FOOTAGE	1,250 - 2,499	583,515	876,417	85,471	1,545,403	1,807	1,873	1,819	1,844
COSTS $		17,311,411	42,044,709	3,095,060	62,451,180	53,596	89,839	65,852	74,524
WELLS		724	1,102	87	1,913				
FOOTAGE	2,500 - 3,749	2,326,594	3,716,570	281,289	6,324,453	3,214	3,373	3,233	3,306
COSTS $		72,756,357	137,372,726	6,810,575	216,939,658	100,492	124,658	78,282	113,403
WELLS		250	1,361	43	2,154				
FOOTAGE	3,750 - 4,999	1,072,903	7,834,467	186,642	9,094,012	4,292	4,210	4,341	4,222
COSTS $		44,607,619	268,596,121	6,326,354	319,530,094	178,430	144,329	147,125	148,343
WELLS		169	1,305	37	1,211				
FOOTAGE	5,000 - 7,499	913,371	5,598,669	208,964	6,721,004	5,405	5,571	5,648	5,550
COSTS $		34,003,465	199,486,857	7,514,140	241,004,862	201,206	198,494	203,085	199,013
WELLS		1	5	2	8				
FOOTAGE	7,500 - 9,999	7,805	40,340	17,212	65,357	7,805	8,068	8,606	8,170
COSTS $		331,999	2,902,213	1,338,650	4,572,862	331,999	530,443	669,325	571,608
WELLS		--	1	--	1				
FOOTAGE	10,000 - 12,499	--	11,462	--	11,462	--	11,462	--	11,462
COSTS $		--	4,340,728	--	4,340,728	--	4,340,728	--	4,340,728
WELLS		--	--	1	1				
FOOTAGE	12,500 - 14,999	--	--	13,848	13,848	--	--	13,848	13,848
COSTS $		--	--	3,171,290	3,171,290	--	--	3,171,290	3,171,290
WELLS		--	--	--	--				
FOOTAGE	15,000 - 17,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	17,500 - 19,999	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		1,966	4,654	260	6,880				
TOTAL FOOTAGE		5,327,786	18,277,396	824,465	24,429,647	2,710	3,927	3,171	3,551
TOTAL COSTS $		182,714,633	664,568,412	28,915,787	376,198,832	92,937	142,795	111,215	127,354

* Includes New York, Ohio, Pennsylvania, and West Virginia.

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

OFFSHORE FED - TOTAL*

Table 52

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	2	2				
FOOTAGE	2,500 - 3,749	--	--	6,716	6,716	--	--	3,358	3,358
COSTS $		--	--	7,855,452	7,855,452	--	--	3,927,726	3,927,726
WELLS		--	--	3	3				
FOOTAGE	3,750 - 4,999	--	--	13,201	13,201	--	--	4,400	4,400
COSTS $		--	--	20,289,498	20,289,498	--	--	6,763,166	6,763,166
WELLS		7	--	8	15				
FOOTAGE	5,000 - 7,499	43,689	--	50,747	94,436	6,241	--	6,343	6,296
COSTS $		56,503,759	--	72,729,225	129,232,984	8,071,966	--	9,091,153	8,615,532
WELLS		4	4	12	20				
FOOTAGE	7,500 - 9,999	35,256	37,754	102,067	175,077	8,814	9,439	8,506	8,754
COSTS $		33,276,907	36,744,039	108,155,280	178,176,226	8,319,227	9,186,010	9,012,940	8,908,811
WELLS		13	8	8	29				
FOOTAGE	10,000 - 12,499	149,360	91,552	90,727	331,639	11,489	11,444	11,341	11,436
COSTS $		73,320,890	29,546,929	75,956,369	179,324,188	5,678,530	3,693,366	9,494,546	6,183,593
WELLS		3	--	12	15				
FOOTAGE	12,500 - 14,999	40,627	--	164,917	205,544	13,542	--	13,743	13,703
COSTS $		27,028,691	--	132,813,473	159,842,164	9,009,564	--	11,067,789	10,656,144
WELLS		1	1	--	2				
FOOTAGE	15,000 - 17,499	17,385	15,306	--	32,691	17,385	15,306	--	16,346
COSTS $		2,811,573	2,221,804	--	5,033,377	2,811,573	2,221,804	--	2,516,689
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	18,444	18,444	--	--	18,444	18,444
COSTS $		--	--	28,786,466	28,786,466	--	--	28,786,466	28,786,466
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		28	13	46	87				
TOTAL FOOTAGE		286,317	144,612	446,819	877,748	10,226	11,124	9,713	10,089
TOTAL COSTS $		193,441,920	68,512,772	446,585,763	708,540,355	6,908,637	5,270,213	9,708,386	8,144,142

* Includes Offshore Federal Waters-Alaska, Offshore Federal Waters-Atlantic Coast, and Offshore Federal Waters-Pacific Coast, which are not shown separately.

ESTIMATED COSTS OF DRILLING AND EQUIPPING WELLS, BY DEPTH INTERVALS - 1983

OFFSHORE FED. - GULF NORTH

Table 53

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS				AVERAGE DEPTH AND COST PER WELL			
		OIL WELLS	GAS WELLS	DRY HOLES	TOTAL	OIL	GAS	DRY	TOTAL
WELLS		--	--	--	--				
FOOTAGE	0 - 1,249	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	--	--				
FOOTAGE	1,250 - 2,499	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
WELLS		--	--	1	1				
FOOTAGE	2,500 - 3,749	--	--	3,050	3,050	--	--	3,050	3,050
COSTS $		--	--	1,296,250	1,296,250	--	--	1,296,250	1,296,250
WELLS		--	--	1	1				
FOOTAGE	3,750 - 4,999	--	--	4,700	4,700	--	--	4,700	4,700
COSTS $		--	--	1,301,736	1,301,736	--	--	1,301,736	1,301,736
WELLS		2	--	3	5				
FOOTAGE	5,000 - 7,499	13,150	--	19,345	31,495	6,575	--	6,115	6,299
COSTS $		8,646,672	--	10,368,079	19,214,751	4,423,336	--	3,456,026	3,842,950
WELLS		4	4	6	14				
FOOTAGE	7,500 - 9,999	35,256	37,754	51,388	124,398	8,814	9,439	8,565	8,886
COSTS $		33,276,907	36,744,039	30,371,630	100,392,576	8,319,227	9,186,010	5,061,939	7,170,899
WELLS		13	8	7	28				
FOOTAGE	10,000 - 12,499	149,360	91,552	80,023	320,935	11,489	11,444	11,432	11,462
COSTS $		73,820,890	29,546,929	58,113,471	161,481,290	5,678,530	3,693,366	8,301,925	5,767,189
WELLS		3	--	10	13				
FOOTAGE	12,500 - 14,999	40,627	--	135,917	176,544	13,542	--	13,592	13,580
COSTS $		27,028,691	--	73,679,921	100,708,612	9,009,564	--	7,367,992	7,746,817
WELLS		1	1	--	2				
FOOTAGE	15,000 - 17,499	17,385	15,306	--	32,691	17,385	15,306	--	16,346
COSTS $		2,811,573	2,221,804	--	5,033,377	2,811,573	2,221,804	--	2,516,689
WELLS		--	--	1	1				
FOOTAGE	17,500 - 19,999	--	--	18,444	18,444	--	--	18,444	18,444
COSTS $		--	--	28,786,466	28,786,466	--	--	28,786,466	28,786,466
WELLS		--	--	--	--				
FOOTAGE	20,000 & OVER	--	--	--	--	--	--	--	--
COSTS $		--	--	--	--	--	--	--	--
TOTAL WELLS		23	13	29	65				
TOTAL FOOTAGE		255,778	144,612	311,867	712,257	11,121	11,124	10,754	10,958
TOTAL COSTS $		145,734,733	68,512,772	203,917,553	418,215,058	6,338,467	5,270,213	7,031,640	6,434,078

APPENDICES

JOINT ASSOCIATION SURVEY ON DRILLING COSTS — 1983

CONFIDENTIAL

WELLS DRILLED, FOOTAGE, AND COST IN THE U.S.

CONFIDENTIAL

PAGE

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER
ABC OIL COMPANY 1 J. C. KANE	MONTANA	ON	999	25 017 23459 00 17

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE
EXP-DRY	0	0	3456	08/83	031	15-N	053-E			

COUNTY NAME	LOCATION	TOTAL COST
CLUSTER	958 FNL 388 FWL	

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER
ABC OIL COMPANY 3 HAYES	MONTANA	ON	999	25 033 10432 00 17

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE
DEV-OIL	1	0	2335	04/83	017	019-N	044-E			

COUNTY NAME	LOCATION	TOTAL COST
GARFIELD	348 FSL 457 FWL	

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER
ABC OIL COMPANY 2 B W BOWERS	MONTANA	ON	999	25 083 22106 00 17

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE
DEV-DRY	0	0	10435	11/83	004	025-N	055-E			

COUNTY NAME	LOCATION	TOTAL COST
RICHLAND	120 FSL 234 FEL	

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE

COUNTY NAME	LOCATION	TOTAL COST

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE

COUNTY NAME	LOCATION	TOTAL COST

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE

COUNTY NAME	LOCATION	TOTAL COST

OPERATOR NAME – WELL NUMBER – LEASE NAME	STATE	SHORE	OP CODE	WELL IDENTIFICATION NUMBER

TYPE	OIL ZONES	GAS ZONES	DEPTH	COMPLETION DATE	SECTION	TWP	RANGE	CDS	X COORD or LATITUDE	Y COORD or LONGITUDE

COUNTY NAME	LOCATION	TOTAL COST

INDIVIDUAL SUBMITTING REPORT: _____

TELEPHONE NUMBER: AC _____ _____

INSTRUCTIONS AND DEFINITIONS FOR DRILLING COSTS

1. If a well shown on the computer listing was completed by you as operator in the survey year (whether actually drilled by you or drilled for you by a contractor), you only need to insert the total cost of the well as defined in Section 14 below.

2. Wells shown on the computer listing not actually completed by you during the calendar survey year should be deleted from the computer list. Please indicate the reason for the deletions.

3. If as operator, you completed wells in the calendar survey year not shown on the computer listing, such wells should be reported on the enclosed blank forms.

4. **WELLS TO BE REPORTED.** Report each domestic well completed by you as operator in the survey year (whether actually drilled by you or drilled for you by contractors). Report each well completed by you *as operator* regardless of the size of your working interest in the well. Do not report wells drilled by others in which you may have had only part of a working interest regardless of the size of such interest. Do not report wells started in the survey year or in prior years, but not completed as of December 31 of the survey year. Do not report wells reentered for completion at shallower depths, old wells drilled deeper, redrilled wells, old wells worked over, stratigraphic tests, core tests, or service wells (including input wells).

5. **SHORE.** Enter "OFF" if well is located offshore; enter "ON" if it is onshore. An offshore well is one which is bottomed at, or produces from, a point which lies seaward of the coastline. If a state agency uses a different basis for classifying onshore and offshore wells, the state classification should be used. In general, the term "coastline" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking the seaward limit of inland waters. For purposes of the JAS, Cook Inlet (Alaska) is classified as "offshore."

6. **OP CODE.** Make no entry. The API will supply the operator code.

7. **WELL IDENTIFICATION NUMBER.** Enter the state designated API number if it is available. Where states do not assign API Well Numbers, or if you do not know the number, leave this item blank.

8. **TYPE.** Insert the classification for each well reported as either an exploratory (**EXPL**) or a development (**DEV**) well. Exploratory wells include new-field wildcats, new-pool wildcats, deeper-pool tests, shallower-pool tests, and outposts (extensions). Development wells include all wells drilled to produce oil or gas from pools discovered by previous drilling. (See attached diagram and definitions.) If your system of classification differs from that used by the **API-AAPG**, you may report wells on the basis of classification reflected in your accounts.

   Subclassify all wells as either (1) oil wells, (2) gas wells, or (3) dry holes, e.g. **"EXPL-OIL," "DEV-GAS,"** etc. An *oil well* is one which can produce hydrocarbons existing in the reservoir in liquid form. A *gas well* is one which can produce hydrocarbons existing initially in a gaseous phase in the reservoir. So-called gas condensate wells should be reported as gas wells. The state regulatory classification should be used, if available; if not available, use a classification by company engineers.

   Count *multiple completions* as one well. (See Number 9, OIL ZONES, GAS ZONES., for a definition of a multiple completion.)

9. **OIL ZONES, GAS ZONES.** Enter the total number of oil zones and gas zones in the appropriate space.

   As noted under Number 8, a multiple completion should be reported as one well. A multiple completion well is a well equipped to produce oil and/or gas separately from more than one reservoir. Such wells contain multiple strings of tubing or other equipment which permit production from the various completions to be measured and accounted for separately.

   Report a multiple completion well as an oil well if oil is produced from at least one of several zones, even though gas and gas condensate may be produced from one or more zones in the same well. Report a multiple completion well as a gas well if oil is not produced from any of the several zones.

   For a dry hole enter word **"DRY."**

10. **DEPTH.** Report for each well the total feet of penetration measured down the well bore. Include all plugged back footage, but exclude bypassed footage resulting from remedial sidetrack drilling operations. For *offshore wells* drilled from a platform or barge over water and the reference point is above water, the depth of the water is included in the total length of the well bore.

11. **COMPLETION DATE.** Enter month and year of completion.

12. **SECTION, TWP, RANGE.** Enter location data if appropriate for area.

13. **LOCATION.** Enter other available information that would be helpful in identifying well location.

14. **TOTAL COST.** Report the *total* cost (tangible and intangible) of each well completed by you as operator in the survey year (whether actually drilled by you or drilled for you by contractors). The *total* of such costs should be reported even though you as operator had only a part of a working interest in the well. Do not report the cost of wells drilled by others in which you had a working interest regardless of the size of such interest. The costs to be reported are those associated with wells which are completed during the survey year and the dollar amount to be reported is the accumulated cost of such wells from the time locations were made until the wells were completed as productive wells or abandoned after drilling was terminated because they were non-productive.

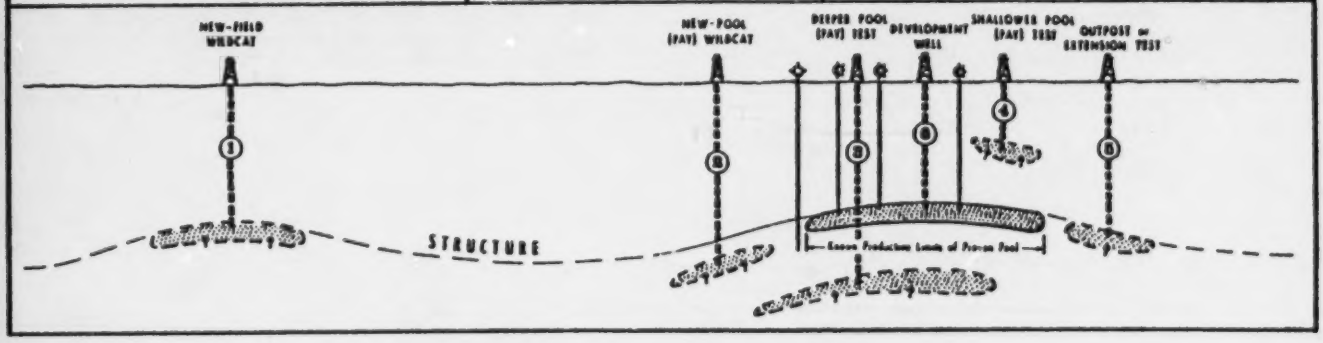
   In general, the elements contributing to reported cost are the expenditures for drilling dry holes and productive wells and equipping new productive wells through the Christmas tree installation. More specifically, these cost elements are the costs of labor, materials, supplies, water, fuels, power, and direct overhead (i.e., field, district, and regional), for such operations as site preparation, road building, erecting and dismantling derricks and drilling rigs, drilling hole, running and cementing casing, hauling materials, etc. Include the total cost of water, if purchased, or cost of water well, if drilled and chargeable to oil or gas well drilling operations. Well costs also include machinery and tool charges and rentals, and depreciation charges, where appropriate, for rigs and other equipment and facilities which will be used in drilling more than one well. Deduct the condition value of materials salvaged after use where appropriate.

   Do not report the cost of lease equipment such as artificial lift equipment and downhole lift equipment, flow lines, flow tanks, separators, etc., that are required for production. Do not reduce reported costs by test well, bottom hole, or dry hole contributions.

   For *offshore wells*, include costs on fixed platforms and islands. Where facilities serve more than one well, the costs should be allocated to each well on the basis of the operator's best current estimate of the ultimate number of wells that will use the facility. Also, include cost expirations (depreciation or amortization) for company-owned mobile platforms, barges, and tenders.

AAPG and API Classification of Wells

OBJECTIVE OF DRILLING				INITIAL CLASSIFICATION ♦ WHEN DRILLING IS STARTED	FINAL CLASSIFICATION AFTER COMPLETION OR ABANDONMENT			
					SUCCESSFUL ● ✪ ✹		UNSUCCESSFUL ✧	
Drilling for a new field on a structure or in an environment never before productive				1. NEW-FIELD WILDCAT	NEW-FIELD DISCOVERY WILDCAT		DRY NEW-FIELD WILDCAT	
Drilling for a new pool on a structure or in a geological environment already productive	NEW POOL TESTS	Drilling outside limits of a proved area of pool		2. NEW-POOL (PAY) WILDCAT	NEW-POOL DISCOVERY WELLS (Sometimes extension wells)	NEW-POOL DISCOVERY WILDCAT (Sometimes an extension well)	DRY NEW-POOL TESTS	DRY NEW-POOL WILDCAT
		Drilling inside limits of proved area of pool	For a new pool below deepest proven pool	3. DEEPER POOL (PAY) TEST		DEEPER POOL DISCOVERY WELL		DRY DEEPER POOL TEST
			For a new pool above deepest proven pool	4. SHALLOWER POOL (PAY) TEST		SHALLOWER POOL DISCOVERY WELL		DRY SHALLOWER POOL TEST
Drilling for long extension of a partly developed pool				5. OUTPOST or EXTENSION TEST	EXTENSION WELL (Sometimes a new-pool discovery well)		DRY OUTPOST OR DRY EXTENSION TEST	
Drilling to exploit or develop a hydrocarbon accumulation discovered by previous drilling				6. DEVELOPMENT WELL	DEVELOPMENT WELL		DRY DEVELOPMENT WELL	



LAHEE CLASSIFICATION OF WELLS, AS APPLIED BY CSD

Tests drilled with the intent of being completed as hydrocarbon producers if found

NEW FIELD WILDCAT. A new field wildcat is located far from producing pools, and on a structure which has not produced before. In regions where local structure has little or no control on accumulation, these holes are generally at least 2 miles from the nearest productive area. Distance, however, is not the determining factor. The classification is based on the degree of risk assumed by the operator, and his intention to test a structure or stratigraphic condition not previously proved productive.

NEW-POOL (PAY) WILDCAT. A new-pool wildcat is located to explore for new pools on a structure already producing, but off to one side of the presently producing area. In some regions where local structure is almost negligible as a control, exploration holes of this group may be called "near wildcats." Such will usually be less than 2 miles from the nearest productive area. Sometimes a new-pool wildcat may extend a pool already partly developed, if so its final classification is an Extension.

DEEPER-POOL (PAY) TEST. A deeper-pool test is an exploratory hole located within the productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest such pool penetrated by it to explore for deeper unknown prospects. Sometimes such a hole extends a deeper pool which has been partly developed in another part of the field.

SHALLOWER-POOL (PAY) TEST. A shallower-pool test is exploratory only if drilled in search of some new productive reservoir, unknown but possibly suspected from data secured from other wells. The test must be located within the productive area of a pool, or pools, previously developed. Sometimes such a test extends a shallower-pool partly developed elsewhere in the same field.

OUTPOST OR EXTENSION TEST. An outpost is located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive area. Sometimes an outpost discovers a new pool.

DEVELOPMENT WELL. A well drilled to exploit a hydrocarbon accumulation discovered by previous drilling.

Tests drilled without the intent of being completed for hydrocarbon production

STRATIGRAPHIC TEST. A drilling effort, geologically directed, to obtain information pertaining to a specific earth condition that might lead toward a possible accumulation of hydrocarbon. It must be drilled without the intention of being completed for hydrocarbon production. This classification includes tests identified as core tests by some operators.

SERVICE WELL. A well that is either drilled or completed for the purpose of supporting production of an existing field through observation, injection, water supply, etc.

MISCELLANEOUS. Any test drilled that does not fit one of the above classifications.

RECONCILIATION OF TOTAL 1983 U.S. WELLS AND FOOTAGE

QRDS vs. JAS

	Oil Wells		Gas Wells		Dry Holes		Total	
	No.	Footage	No.	Footage	No.	Footage	No.	Footage
QRDS-Exploratory Wells	2,093	10,703,744	1,889	11,579,640	9,908	49,935,972	13,890	72,219,356
QRDS-Development Wells	35,114	125,203,154	13,739	71,646,416	13,586	56,690,865	62,439	253,540,435
Total QRDS Wells	37,207	135,906,898	15,628	83,226,056	23,494	106,626,837	76,329	325,759,791
Adjustment Type I (Net)	-4,712	-9,482,435	-3,160	-14,396,656	-2,707	-11,316,897	-10,579	-35,195,988
Adjustment Type II (Net)	+990	+4,399,466	+451	+3,657,944	+345	+2,604,619	+1,786	+10,662,029
	33,485	130,823,929	12,919	72,487,344	21,132	97,914,559	67,536	301,225,832

Note: Adjustments Type I and Adjustments Type II are outlined on page 2.

SUMMARY OF SAMPLE DATA - 1993

EXPLORATORY WELLS

	DEPTH INTERVAL (FEET)	TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS: OIL WELLS	GAS WELLS	DRY HOLES	AVERAGE DEPTH AND COST PER WELL: OIL	GAS	DRY
WELLS		8	8	60			
FOOTAGE	0 - 1,249	6,780	7,902	51,888	848	988	865
COSTS $		516,549	249,178	1,612,348	64,569	31,147	26,872
WELLS		28	23	151			
FOOTAGE	1,250 - 2,499	54,195	45,300	292,396	1,936	1,957	1,936
COSTS $		2,529,678	2,859,515	11,211,357	90,346	124,327	74,247
WELLS		64	49	359			
FOOTAGE	2,500 - 3,749	205,174	159,373	1,160,419	3,206	3,253	3,232
COSTS $		10,124,580	11,728,534	41,450,001	158,197	239,358	115,460
WELLS		134	74	542			
FOOTAGE	3,750 - 4,999	593,304	331,133	2,388,066	4,428	4,475	4,406
COSTS $		29,019,308	17,463,189	93,695,000	216,562	235,989	172,869
WELLS		172	127	781			
FOOTAGE	5,000 - 7,499	1,062,572	796,045	4,796,940	6,178	6,268	6,142
COSTS $		94,220,642	57,974,463	294,543,968	547,794	456,492	377,137
WELLS		99	118	479			
FOOTAGE	7,500 - 9,999	857,376	1,027,336	4,143,025	8,660	8,706	8,649
COSTS $		72,598,426	124,715,494	492,708,737	733,317	1,056,911	1,028,620
WELLS		76	98	286			
FOOTAGE	10,000 - 12,499	841,498	1,079,905	3,187,631	11,072	11,019	11,146
COSTS $		89,889,282	223,792,465	410,673,776	1,182,754	2,283,597	1,435,922
WELLS		47	63	161			
FOOTAGE	12,500 - 14,999	631,150	852,454	2,170,426	13,429	13,531	13,481
COSTS $		141,222,424	256,053,565	620,238,538	3,004,733	4,064,342	3,852,413
WELLS		10	38	74			
FOOTAGE	15,000 - 17,499	159,019	611,041	1,200,361	15,902	16,080	16,221
COSTS $		48,460,914	224,505,045	429,050,165	4,846,092	5,908,028	5,797,975
WELLS		3	14	29			
FOOTAGE	17,500 - 19,999	55,188	255,890	534,614	18,396	18,278	18,435
COSTS $		17,162,831	123,084,940	256,347,243	5,720,944	8,791,781	8,839,560
WELLS		2	4	16			
FOOTAGE	20,000 & OVER	46,805	86,104	361,837	23,403	21,526	22,615
COSTS $		27,068,488	63,890,754	242,892,266	13,534,244	15,972,689	15,180,767

SUMMARY OF SAMPLE DATA - 1983

DEVELOPMENT WELLS

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS			AVERAGE DEPTH AND COST PER WELL		
		OIL WELLS	GAS WELLS	DRY HOLES	OIL	GAS	DRY
WELLS		1,097	54	165			
FOOTAGE	0 - 1,249	963,274	51,224	133,380	878	949	808
COSTS $		57,504,582	1,923,933	15,583,752	52,420	35,628	94,447
WELLS		1,823	211	268			
FOOTAGE	1,250 - 2,499	3,196,455	413,703	502,232	1,753	1,961	1,874
COSTS $		198,398,980	17,331,867	19,094,720	108,831	82,142	71,249
WELLS		2,184	519	591			
FOOTAGE	2,500 - 3,749	6,928,101	1,674,464	1,906,318	3,172	3,226	3,226
COSTS $		350,445,263	83,441,150	56,639,118	160,460	160,773	95,836
WELLS		1,801	673	604			
FOOTAGE	3,750 - 4,999	7,992,920	2,394,916	2,636,579	4,438	4,302	4,365
COSTS $		418,584,511	137,297,537	76,980,973	232,418	203,993	127,452
WELLS		2,141	952	695			
FOOTAGE	5,000 - 7,499	13,221,765	5,794,185	4,290,357	6,176	6,086	6,173
COSTS $		865,512,901	338,891,887	197,025,573	404,256	355,979	283,490
WELLS		1,549	680	448			
FOOTAGE	7,500 - 9,999	13,423,944	5,851,812	3,845,299	8,666	8,606	8,583
COSTS $		1,265,707,252	511,672,699	273,186,833	817,113	752,754	609,792
WELLS		561	409	241			
FOOTAGE	10,000 - 12,499	6,117,776	4,559,916	2,687,438	10,905	11,149	11,151
COSTS $		946,867,321	674,008,377	304,995,362	1,687,856	1,647,942	1,265,541
WELLS		146	206	155			
FOOTAGE	12,500 - 14,999	1,953,651	2,760,269	2,102,200	13,381	13,399	13,563
COSTS $		445,032,706	627,267,468	381,146,093	3,048,169	3,044,988	2,459,007
WELLS		32	97	59			
FOOTAGE	15,000 - 17,499	517,091	1,543,749	945,561	16,159	15,915	16,026
COSTS $		191,432,428	499,509,407	213,671,905	5,982,264	5,149,582	3,706,304
WELLS		2	45	24			
FOOTAGE	17,500 - 19,999	37,720	328,257	442,488	18,860	18,406	18,437
COSTS $		16,598,909	317,267,835	160,178,951	8,299,455	7,050,397	6,674,123
WELLS		--	6	3			
FOOTAGE	20,000 & OVER	--	134,803	65,880	--	22,467	21,960
COSTS $		--	37,353,971	51,879,671	--	14,558,995	17,293,225

SUMMARY OF SAMPLE DATA - 1983

SINGLE-COMPLETION WELLS

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS		AVERAGE DEPTH AND COST PER WELL	
		OIL WELLS	GAS WELLS	OIL	GAS
WELLS		1,098	62		
FOOTAGE	0 - 1,249	963,074	59,126	877	954
COSTS $		57,746,494	2,173,111	52,592	35,050
WELLS		1,939	232		
FOOTAGE	1,250 - 2,499	3,225,544	454,353	1,755	1,958
COSTS $		199,904,393	20,034,773	108,764	86,357
WELLS		2,209	528		
FOOTAGE	2,500 - 3,749	7,001,750	1,697,401	3,170	3,215
COSTS $		354,454,469	89,417,462	160,459	169,351
WELLS		1,981	715		
FOOTAGE	3,750 - 4,999	8,357,704	3,091,856	4,443	4,324
COSTS $		435,799,633	148,345,750	231,685	207,477
WELLS		2,272	1,014		
FOOTAGE	5,000 - 7,499	14,027,742	6,188,189	6,174	6,103
COSTS $		939,638,149	369,224,566	413,573	364,127
WELLS		1,618	759		
FOOTAGE	7,500 - 9,999	14,027,827	6,550,117	8,670	8,630
COSTS $		1,317,734,744	608,665,661	814,422	801,931
WELLS		627	491		
FOOTAGE	10,000 - 12,499	6,849,720	5,462,799	10,925	11,126
COSTS $		1,026,557,257	867,576,605	1,637,252	1,766,959
WELLS		189	265		
FOOTAGE	12,500 - 14,999	2,531,671	3,555,461	13,395	13,417
COSTS $		573,819,392	853,640,943	3,036,084	3,221,287
WELLS		41	131		
FOOTAGE	15,000 - 17,499	660,095	2,091,334	16,100	15,964
COSTS $		236,856,358	708,548,854	5,776,985	5,408,770
WELLS		5	58		
FOOTAGE	17,500 - 19,999	92,908	1,066,147	18,582	18,382
COSTS $		33,761,740	435,656,775	6,752,348	7,511,324
WELLS		2	10		
FOOTAGE	20,000 & OVER	46,805	220,907	23,403	22,091
COSTS $		27,068,488	151,244,725	13,534,244	15,124,473

SUMMARY OF SAMPLE DATA - 1983

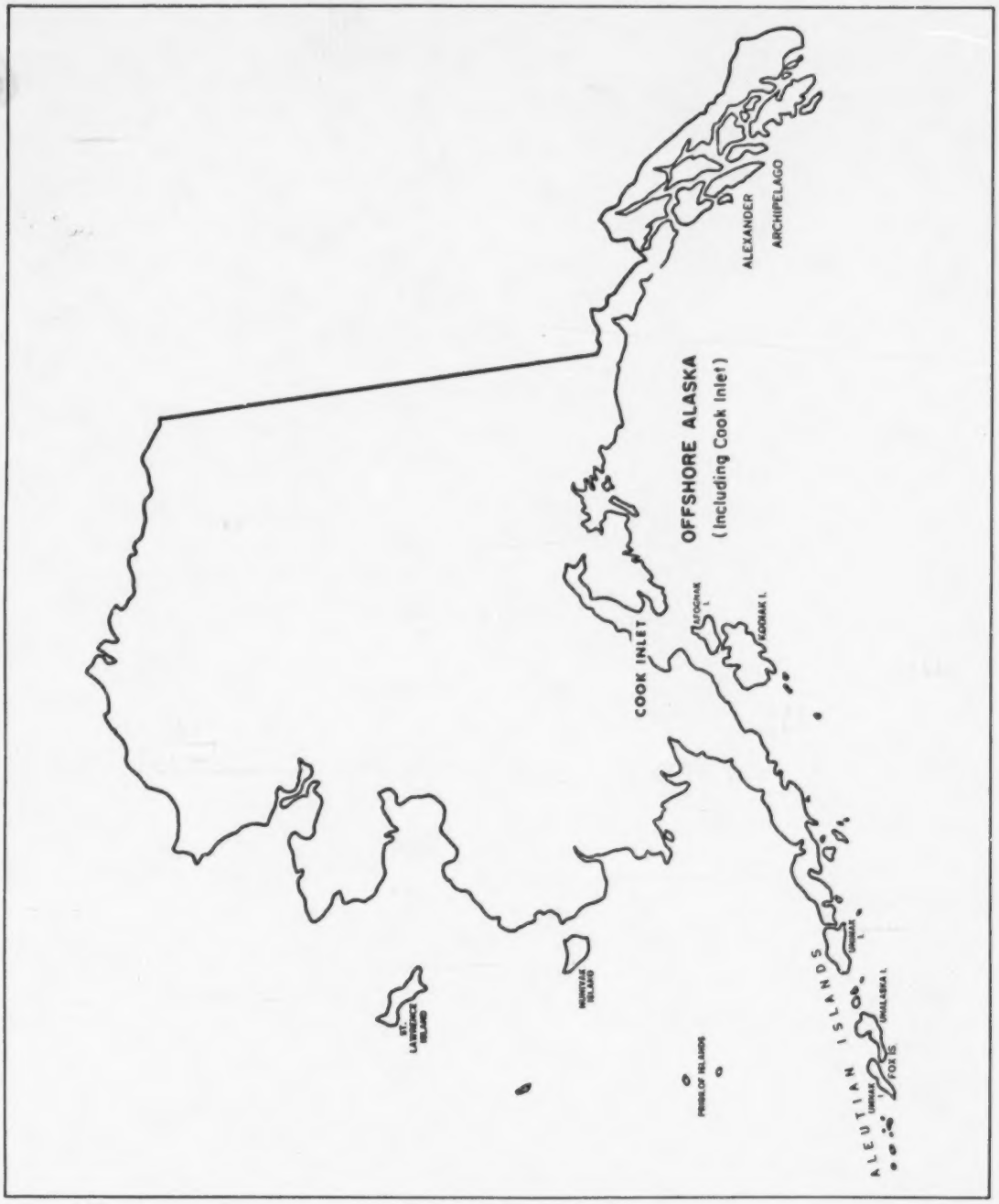
MULTIPLE-COMPLETION WELLS

DEPTH INTERVAL (FEET)		TOTAL NUMBER OF WELLS, FOOTAGE DRILLED, AND COSTS		AVERAGE DEPTH AND COST PER WELL	
		OIL WELLS	GAS WELLS	OIL	GAS
		---	---	---	---
WELLS	0 - 1,249	7	--	997	--
FOOTAGE		6,960	--	39,234	--
COSTS $		274,637	--		
WELLS	1,250 - 2,499	13	2	1,931	2,175
FOOTAGE		25,108	4,350	78,474	78,305
COSTS $		1,020,165	156,609		
WELLS	2,500 - 3,749	39	40	3,372	3,411
FOOTAGE		131,525	136,436	156,804	143,806
COSTS $		5,115,374	5,752,222		
WELLS	3,750 - 4,999	54	32	4,232	4,194
FOOTAGE		228,520	134,193	218,596	200,156
COSTS $		11,804,140	6,404,976		
WELLS	5,000 - 7,499	41	65	6,258	6,185
FOOTAGE		256,595	402,041	490,132	425,258
COSTS $		20,096,394	27,641,789		
WELLS	7,500 - 9,999	30	39	8,450	8,437
FOOTAGE		253,493	329,031	685,698	715,962
COSTS $		20,570,934	27,922,532		
WELLS	10,000 - 12,499	10	16	10,955	11,064
FOOTAGE		109,554	177,022	1,021,935	1,889,015
COSTS $		10,219,346	30,224,237		
WELLS	12,500 - 14,999	4	4	13,283	14,316
FOOTAGE		53,130	57,262	3,108,810	7,420,023
COSTS $		12,435,238	29,680,090		
WELLS	15,000 - 17,499	--	4	--	15,864
FOOTAGE		--	63,456	--	3,866,400
COSTS $		--	15,465,598		
WELLS	17,500 - 19,999	--	--	--	--
FOOTAGE		--	--	--	--
COSTS $		--	--		
WELLS	20,000 & OVER	--	--	--	--
FOOTAGE		--	--	--	--
COSTS $		--	--		

J.A.S. SAMPLE DISTRIBUTION 1979–1983

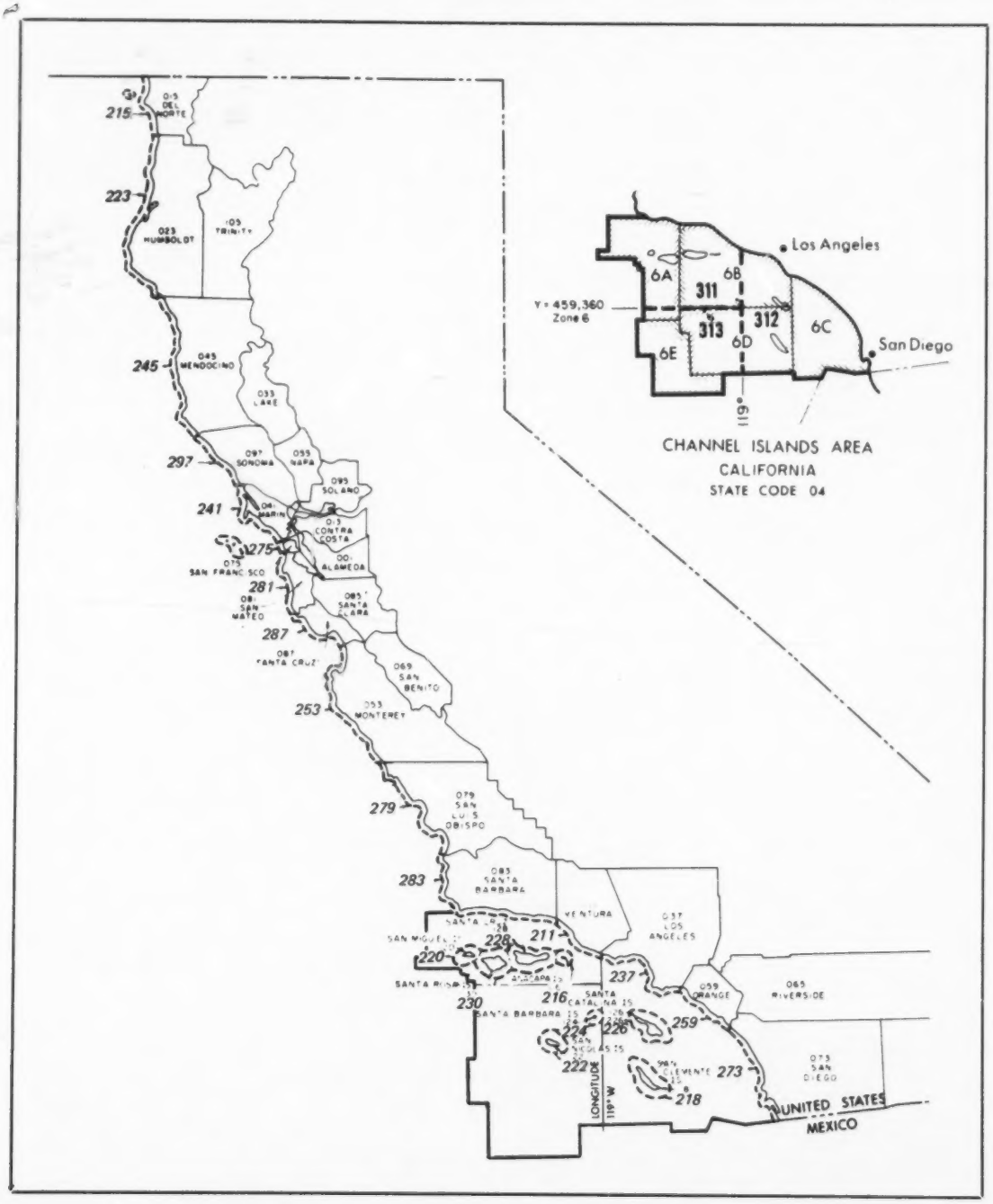
No. of Wells Drilled	1979		1980		1981		1982		1983	
	No. of Co's	No. of Wells	No. of Co's	No. of Wells	No. of Co's	No. of Wells	No. of Co's	No. of Wells	No. of Co's	No. of Wells
1-4	590	1,198	527	1,129	697	1,484	813	1,724	735	1,508
5-9	240	1,608	223	1,519	350	2,354	315	2,122	315	2,087
10-24	196	2,931	232	3,445	298	4,592	320	4,772	283	4,198
25-49	92	3,156	98	3,418	120	4,110	105	3,631	86	2,876
50-99	32	2,245	43	2,976	67	4,501	36	2,463	28	1,859
100 & over	31	9,434	38	11,667	38	13,403	40	11,828	28	10,110
Total	1,181	20,572	1,161	24,154	1,570	30,444	1,629	26,540	1,475	22,638

MAP I
SUBDIVISIONS OF ALASKA



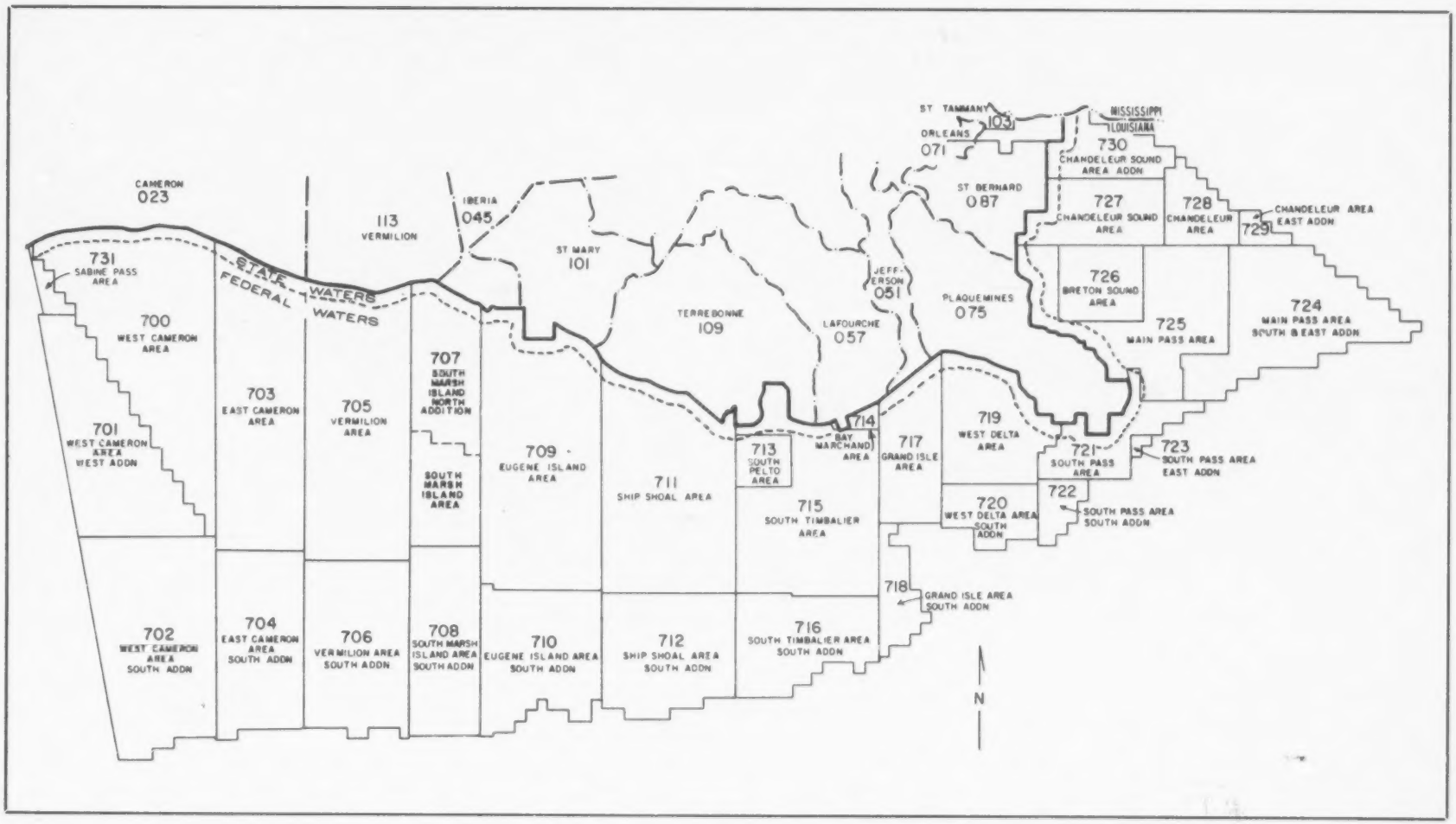
MAP II
SUBDIVISIONS OF CALIFORNIA

MAP III
CALIFORNIA OFFSHORE

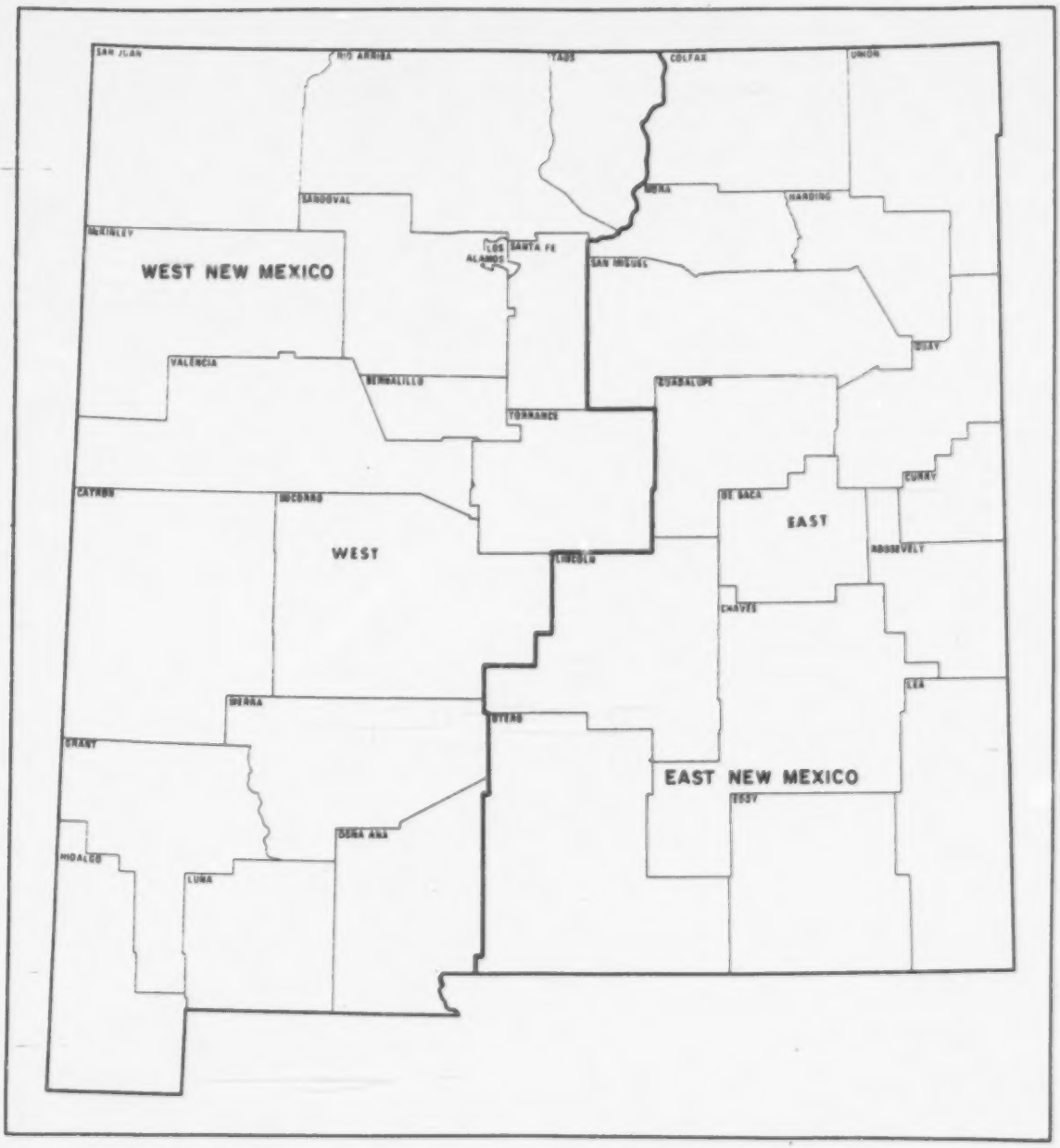


MAP IV
SUBDIVISIONS OF LOUISIANA

MAP V
LOUISIANA OFFSHORE

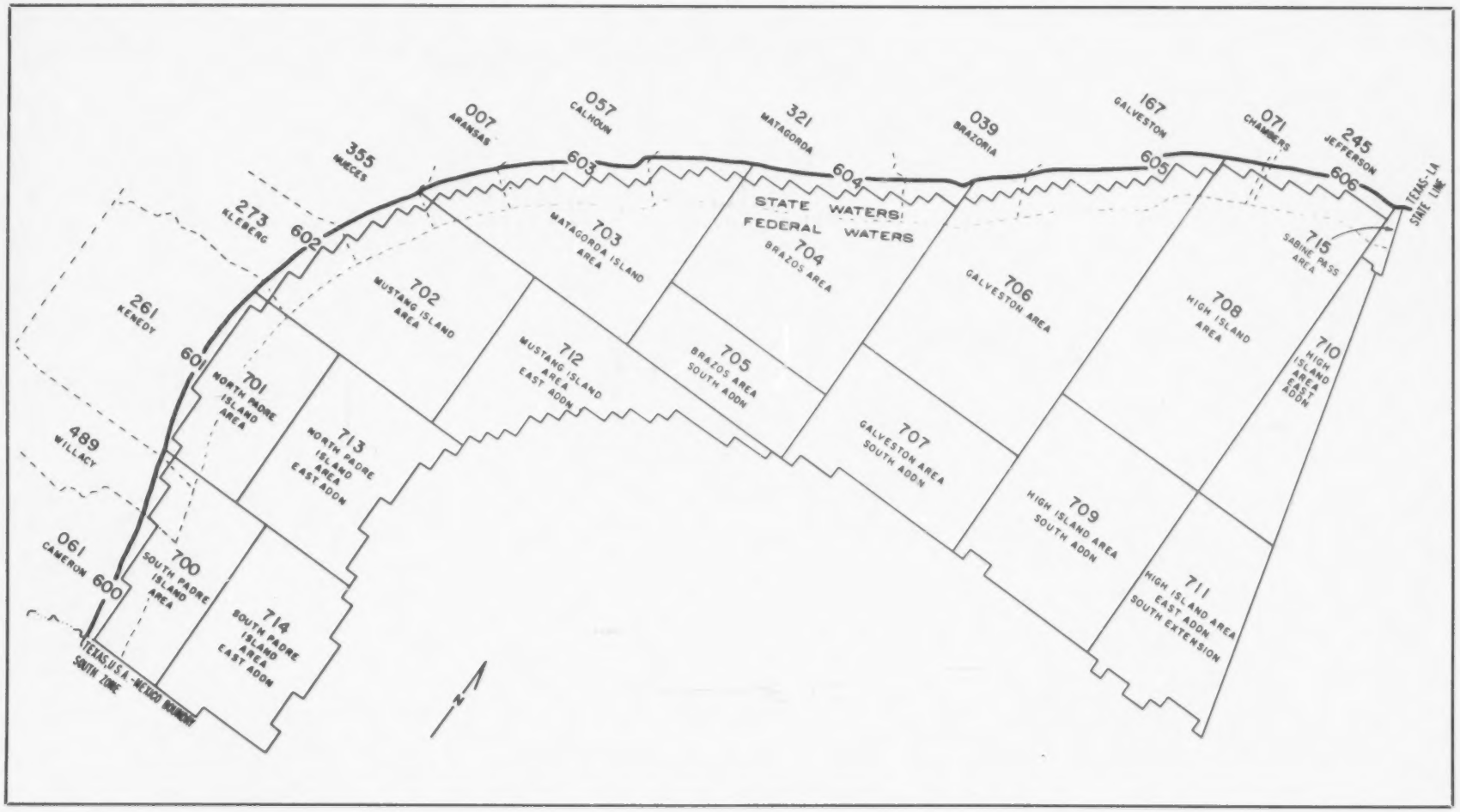

CAMERON 023
113 VERMILION
IBERIA 045
ST MARY 101
TERREBONNE 109
LAFOURCHE 057
JEFFERSON 051
PLAQUEMINES 075
ST BERNARD 087
ST TAMMANY 103
ORLEANS 071
MISSISSIPPI
LOUISIANA
STATE WATERS
FEDERAL WATERS
731 SABINE PASS AREA
700 WEST CAMERON AREA
701 WEST CAMERON AREA WEST ADDN
702 WEST CAMERON AREA SOUTH ADDN
703 EAST CAMERON AREA
704 EAST CAMERON AREA SOUTH ADDN
705 VERMILION AREA
706 VERMILION AREA SOUTH ADDN
707 SOUTH MARSH ISLAND NORTH ADDITION
SOUTH MARSH ISLAND AREA
708 SOUTH MARSH ISLAND AREA SOUTH ADDN
709 EUGENE ISLAND AREA
710 EUGENE ISLAND AREA SOUTH ADDN
711 SHIP SHOAL AREA
712 SHIP SHOAL AREA SOUTH ADDN
713 SOUTH PELTO AREA
714 BAY MARCHAND AREA
715 SOUTH TIMBALIER AREA
716 SOUTH TIMBALIER AREA SOUTH ADDN
717 GRAND ISLE AREA
718 GRAND ISLE AREA SOUTH ADDN
719 WEST DELTA AREA
720 WEST DELTA AREA SOUTH ADDN
721 SOUTH PASS AREA
722 SOUTH PASS AREA SOUTH ADDN
723 SOUTH PASS AREA EAST ADDN
724 MAIN PASS AREA SOUTH & EAST ADDN
725 MAIN PASS AREA
726 BRETON SOUND AREA
727 CHANDELEUR SOUND AREA
728 CHANDELEUR AREA
729 CHANDELEUR AREA EAST ADDN
730 CHANDELEUR SOUND AREA ADDN
N

MAP VI
SUBDIVISIONS OF NEW MEXICO

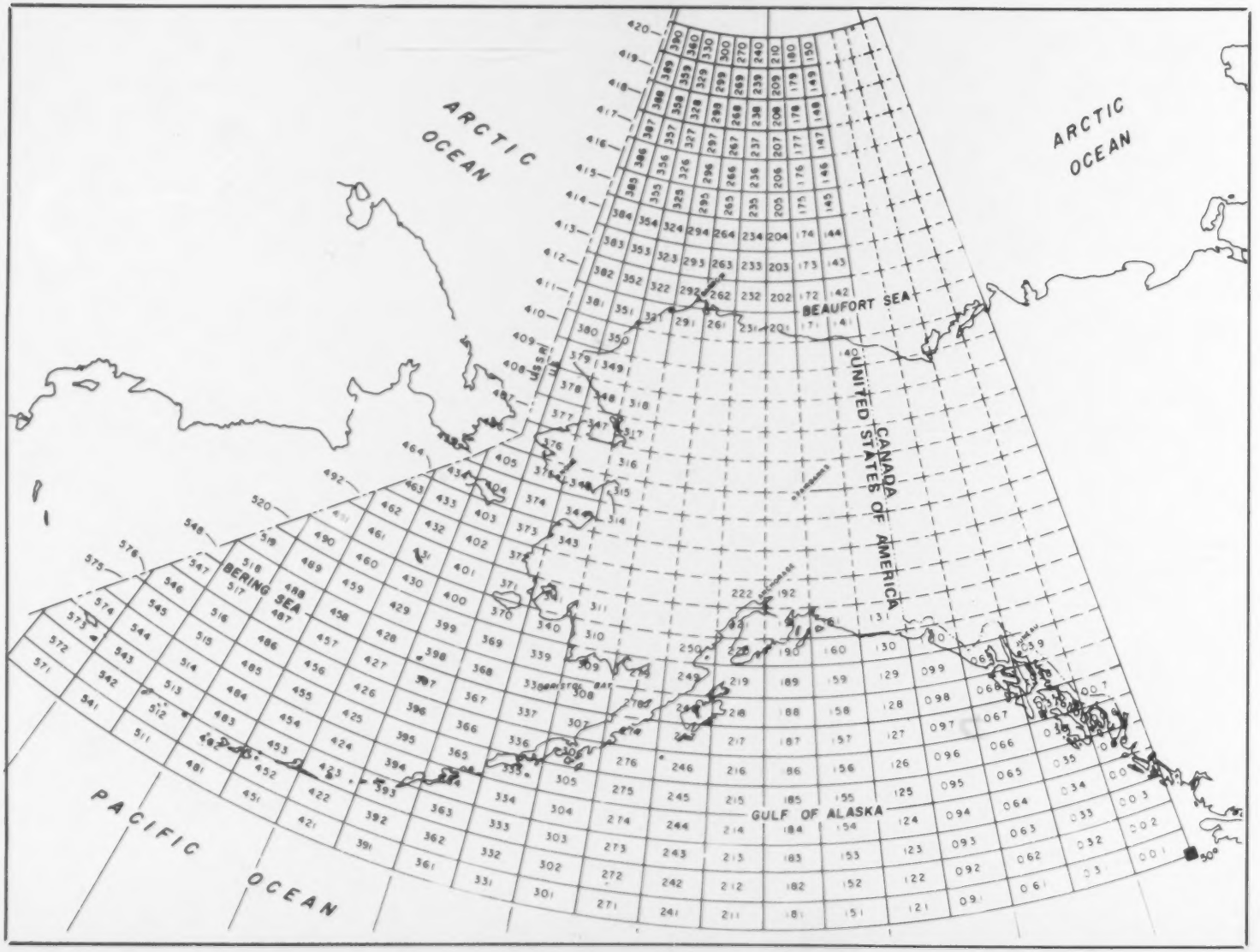


MAP VII
SUBDIVISIONS OF TEXAS

MAP VIII
TEXAS OFFSHORE

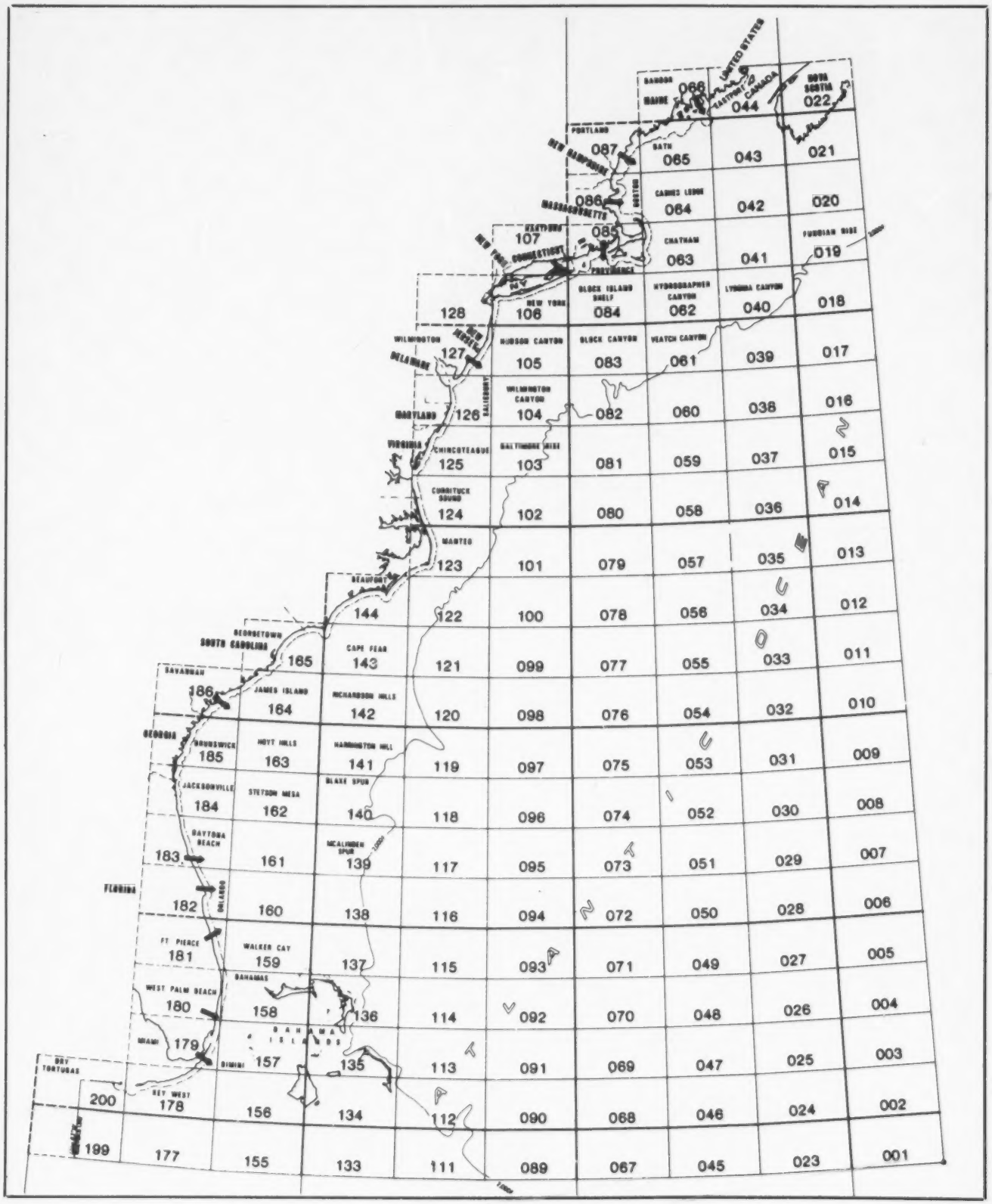


MAP IX
SUBDIVISIONS OF
OFFSHORE FEDERAL WATERS
ALASKA

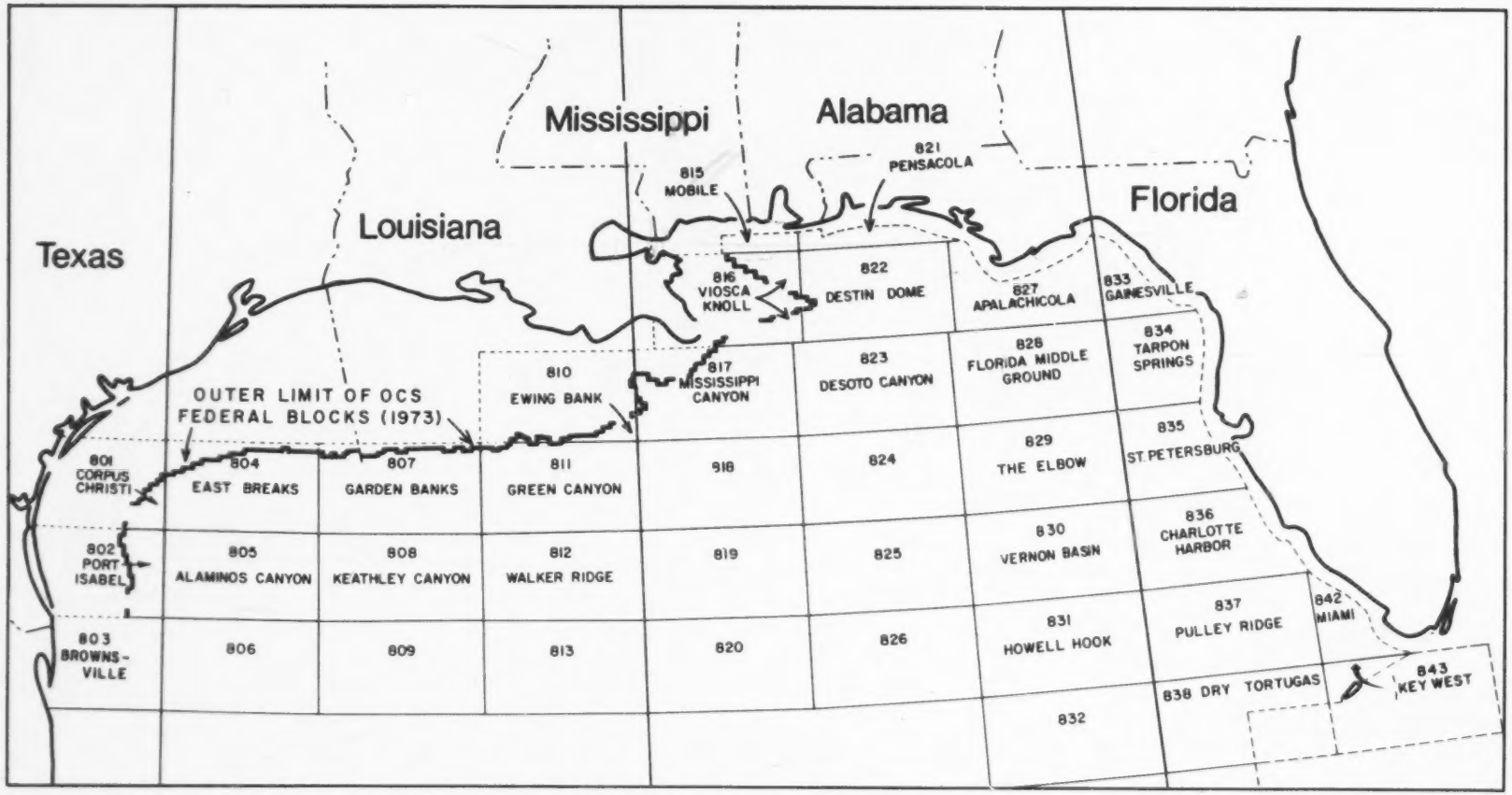


APPENDIX G, P.10

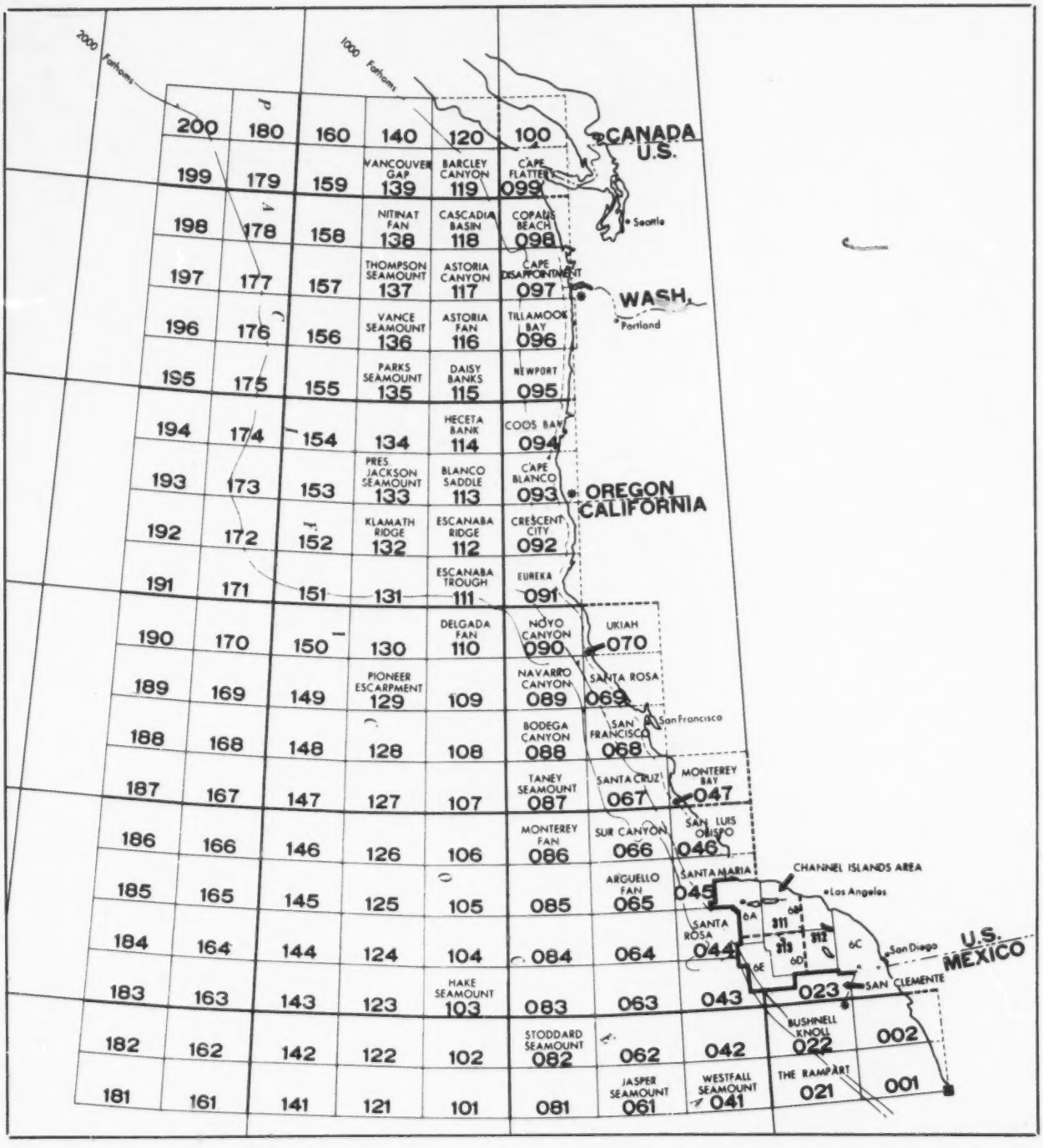
MAP X
SUBDIVISIONS OF OFFSHORE FEDERAL WATERS
ATLANTIC COAST



MAP XI
SUBDIVISIONS OF
OFFSHORE FEDERAL WATERS
GULF OF MEXICO—Northern



MAP XII
SUBDIVISIONS OF
OFFSHORE FEDERAL WATERS
PACIFIC COAST



JOINT ASSOCIATION SURVEY METHODOLOGY

API publishes annual estimates of drilling costs in the U.S. based on a sample of approximately 39 percent of all wells drilled and 61 percent of total drilling costs. The results, published in the Joint Association Survey (JAS), show estimated average drilling costs and total drilling expenditures by state (or other political region), by depth, and by well type. API has cost data only for those wells within the JAS sample. Drilling costs for wells not in the sample must be estimated using the information available from other sources on their depth, location, and well type, and the relationship of these variables to drilling cost as observed in the sample.

REGRESSION ESTIMATES OF WELL COSTS. The current JAS methodology, implemented in the 1978 survey, estimates these nonsample costs using standard multiple regression analysis. A "best fit" equation is estimated from the sample data for a given area, and this equation is then used to estimate the cost of nonsample wells based on their depth, location, and well type.

The particular functional form for the regression equation is:

(1) $$\log(\text{cost per foot}) = a + b\ 1/\text{depth} + c\ \text{depth} + d\ \text{depth}^2 + p_1 I_1 + \ldots + p_9 I_9$$

where depth is in thousands of feet and I_1 through I_9 are indicator variables for well type.[1]

Except for the 1/depth term, this equation is a polynomial, a functional form often used in regression analysis when an *a priori* functional form has not been specified. (Higher order polynomials were investigated but did not improve the fit noticeably). The 1/depth term helps to reflect the decreasing cost per foot observed in the shallower depths in some areas. (As depth increases, 1/depth gets smaller, so that this term's contribution to estimated cost per foot can be larger for shallower depths but quite small at greater depths).

The inclusion of indicator variables allows the level of costs to vary by well type. Since the above equation is in log form, this means that different well types are estimated to be proportional to one another, with the proportions being determined by the regression coefficients of the indicator variables. (When oil, gas, or dry data are regressed separately, fewer indicator variables are needed since there are fewer well types involved in each regression).

[1]An indicator variable takes on the value 1 if the observation is a member of a certain class and 0 if it is not.
In the above equation, the nine indicator variables identify whether a well is one of the ten well types (for example, exploratory oil single completion, development gas multiple completion, exploratory dry, and so on). The tenth well type is identified when all indicator variables are 0.

Because equation (1) is in log form, estimates based on it will be biased downwards. Multiplying the original estimates by the correction factor

(2) $$\frac{\text{sum of actual costs for sample}}{\text{sum of estimated costs for sample}}$$

yields unbiased estimates.

PROCEDURE. Once the JAS sample data have been collected and verified, regression estimates for each geographic area are made using equations (1) and (2). In some areas, oil, gas, and dry wells are combined in one equation. When the sample is large enough, a separate equation is used for each of these three well categories. Inevitably, some nonsample wells fall outside the depth range of the sample. Since, statistically speaking, there is no reason to expect the regression estimates to be "reasonable" for these depths where there is no sample, some of these costs must be estimated independently based on costs in similar areas and previous year's data. This was necessary for approximately 6.4 percent of all unreported wells in 1983.